

AD A115071

NPS54-82-008

NAVAL POSTGRADUATE SCHOOL

Monterey, California



DTIC
ELECTE
JUN 2 1982
S A D

A STUDY OF RELATIONSHIPS
BETWEEN
EDUCATIONAL CREDENTIALS
AND
MILITARY PERFORMANCE CRITERIA

by

Richard S. Elster
and
El1 Flyer

April, 1982

Approved for public release; distribution unlimited

Prepared for:

Naval Postgraduate School
Monterey, California 93940

82 00 00 011

DTIC FILE COPY

NAVAL POSTGRADUATE SCHOOL

Monterey, California


Rear Admiral J. J. Ekelund
Superintendent

David A. Schradly
Provost

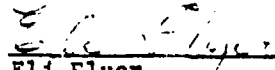
The research summarized herein was sponsored by the National
Institute of Education and the United States Navy.

Reproduction of all or part of this report is authorized.

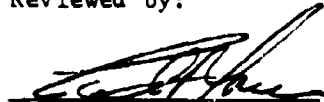
This report was prepared by:


Richard S. Elster, Professor
Department of Administrative Sciences

and


Eli Flyer

Reviewed by:


C. R. JONES, Chairman
Department of Administrative
Sciences

Released by:


W. M. Tolles, Dean of Research

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER NPS54-82-008	2. GPO/Y ACCESSION NO. AD-A115071	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) A Study of the Relationship Between Educational Credentials and Military Performance Criteria		5. TYPE OF REPORT & PERIOD COVERED
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) Richard S. Elster and Eli Flyer		8. CONTRACT OR GRANT NUMBER(s)
9. PERFORMING ORGANIZATION NAME AND ADDRESS Naval Postgraduate School Monterey, California 93940		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS Naval Postgraduate School Monterey, California 93940		12. REPORT DATE April 1982
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		13. NUMBER OF PAGES 202
		15. SECURITY CLASS. (of this report) Unclassified
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release/distribution unlimited		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Military Personnel Education Enlisted Personnel Personnel Performance Careers High School Graduates		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The report provides a comprehensive examination of the performances in the military of non-high school graduates, GED holders, and high school diploma graduates. Data were obtained from DOD and Job Corps data files. Criteria included attrition, retention, assignment, and advancement variables. Analyses were performed using age, race, aptitude level, level of educational accomplishment, and other variables. The report includes a great many data tables.		

DD FORM 1 JAN 73 1473

EDITION OF 1 NOV 65 IS OBSOLETE
S/N 0102-014-6601

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

Richard S. Elster and Eli Flyer
April, 1982

Naval Postgraduate School
Monterey, CA 93940



Accession For
 NAME CHINA
 DATE FEB
 UNCLASSIFIED
 JUSTIFICATION

The research summarized here was sponsored by the National Institute of Education and the United States Navy.

ABSTRACT

✓ This report describes the results of analyses investigating the relationships between pre-service educational background and performance in the military. Military enlistment and Job Corps data files were used to describe the characteristics of males entering the military, and to examine their performance in the military. Comparisons are made among (GED) holders, high school graduates, and non-high school graduates entering the military on background variables such as age. Performance in the military is also examined.

Data from Job Corps trainee data files were used in conjunction with military enlistment data files to prepare descriptions of male Job Corps entrants to the military, and to compare those entrants to non-entrants and to enlistees in general. The performance of Job Corps entrants to the military is also described, and comparisons made with male enlistee performance in general.

FOREWARD

The research reported here was jointly sponsored by the National Institute of Education (NIE) and the Navy. Dr. Jerome Lord monitored the research for NIE.

Four project advisors, chosen by Dr. Lord and the writers of this report, provided guidance during the execution of the project. These advisors were: Dr. Douglas Whitney of the American Council on Education, Dr. Jane Flaherty of the Educational Testing Service, Dr. Robert Hayles of the Office of Naval Research, and Dr. Joan Fischer of Worcester State College. The investigators are responsible for any errors that there might be in this report, however.

Chapters two, three, and four of this report contain a great number of data tables. Each of these chapters is summarized at the end of the chapter. Many readers may wish to read first, or only, the summaries of chapters two, three, and four. The summaries were written with the intention of communicating the major findings in each chapter.

An overall summary and conclusions chapter has also been included as the last chapter in this report.

TABLE OF CONTENTS

	<u>Page</u>
Abstract	iii
Foreward	v
Table of Contents	vii
List of Tables	ix
List of Appendices	xi
Chapter I: Introduction	I-1
Chapter II: The Performance of GED Certificate Holders in the Military	II-1
Chapter III: The Relationships of Job Corps Experience to Enlistment in the Military	III-1
Chapter IV: The Relationships of Job Corps Experiences to Success in the Military	IV-1
Chapter V: Summary	V-1
List of References	V-10
Appendices	
Appendix A: Mean AFQT Scores for FY77 NPS Male Accessions, by Separate Branch of Service	A-1
Appendix B: Racial Trends for NPS Accessions by Fiscal Year of Entry and Educational Level, by Separate Branch of Service	B-1
Appendix C: Description of Job Corps' Data File	C-1
Appendix D: Description of the Defense Manpower Data Center's Cohort Data File	D-1
Appendix E: Census Records - States in the Regions	E-1
Appendix F: Mean AFQT Scores for Non-Prior Service Male Accessions by Educational Level, Fiscal Year of Enlistment, and Branch of Service	F-1

TABLE OF CONTENTS (Continued)

	<u>Page</u>
Appendix G: Mean ASVAB Subtest Scores for FY77 NPS Male Accessions - by Educational and by Branch of Service	G-1
Appendix H: Pay Grade Distributions for CY77 NPS Male Accessions on Active Duty, 30 September 1979 - by Educational Level, AFQT Category, and Service	H-1
Initial Distribution List	I-1

LIST OF TABLES

	<u>Page</u>
1 Number and Percent of Non-Prior Service Male GED Accessions by Service and Fiscal Year of Entry	II-2
2 Percent of DoD Non-Prior Service Male Accessions by Educational Level and Fiscal Year of Entry	II-4
3 Trends in Armed Forces Qualifications Test (AFQT) Scores for Non-Prior Service Male Accessions by Fiscal Year of Entry and Educational Level - Percentage Distributions on a DoD Basis	II-5
4 Mean Armed Forces Qualification Test (AFQT) Scores for DoD Non-Prior Service Male Accessions - by Educational Level and Fiscal Year of Entry	II-7
5 Racial Trends for Non-Prior Service Male Accessions by Fiscal Year of Entry and Educational Level - Percentage Distribution on a DoD Basis	II-8
6 Age Trends for Non-Prior Service Male Accessions by Fiscal Year of Entry and Educational Level - Percentage Distributions on a DoD Basis	II-10
7 Mean Armed Service Vocational Aptitude Battery (ASVAB) Scores for FY77 DoD Non-Prior Service Male Accessions - by Educational Level	II-14
8 Geographic Trends by Census Area for Non-Prior Service Male Accessions by Fiscal Year of Entry and Educational Level - Percentage Distributions on a DoD Basis	II-16
9 Geographic Trends by Census Area for Non-Prior Service Male Accessions by Fiscal Year of Entry and Total Percentage Distributions on a DoD Basis	II-19
10 Military Occupation Percentage Distributions for FY76-FY78 Non-Prior Service Male Accessions by Educational Level	II-20
11 Pay Grade Percentage Distributions for CY77 Non-Prior Service Male Accessions on Active Duty 30 September 1979 - by Educational Level and Service	II-23

LIST OF TABLES (Continued)

	<u>Page</u>
12 Attrition Prior to Completion of the First Three Years of Active Duty for FY73-76 Non-Prior Service Male Accessions - by Service, Educational Level, and Cause for Attrition	II-25
13 Percent Attrition Prior to Completion of the First Three Years of Active Duty for FY73-76 Non-Prior Service, Male Accessions - by Service, Educational Level, and AFQT Groups	II-27
14 Percent Attrition Prior to Completion of the First Three Years of Active Duty for FY73-76 Non-Prior Service Male Accessions by Service, Race, and Educational Level	II-28
15 Trends in Retention Beyond the First Four Years of Active Duty - by Fiscal Year of Entry, Service, and Educational Level	II-30
16 Retention Beyond 48 Months of Active Duty of Personnel on Active Duty at the End of 48 Months of Service - by Service for Personnel Enlisting in Fiscal Year 1975	II-32
17 Attrition from the Navy: Regression Results for Traditional Attrition Variables with Educational Credentials Included as Predictors	II-34
18 Attrition from the Navy: Attrition Regression Results with Situational and Modified Educational Credential Variables Included as Predictors	II-37
19 Attrition from the Army: Prediction of Losses from the Army During the First 3 Years of Enlistment (Data are from 1974-1976 Non-Prior Service Male Accessions: the Dependent Variable Consisted of the Loss Percentages for the Grouping Formed by the Independent Variables)	II-39
20 Educational Level Recorded on the Job Corps' File - by Educational Level Recorded on the Services Data Files	III-3
21 Educational Attainment of Non-Prior Service Males Leaving the Job Corps During the Period 1970-1978 (Includes Both Entrants and Non-Entrants to the Military)	III-5

LIST OF TABLES (Continued)

	<u>Page</u>
22 Characteristics of Job Corps Trainees Entering Service - Year of Entry into Job Corps and Educational Level	III-7
23 Percentages of High School Graduates Among the Job Corps Population Joining the Military and Among the Total Non-Prior Service (NPS) Male Accession Populations	III-9
24 Characteristics of Job Corps Trainees Entering Service - Reason for Leaving Job Corps	III-10
25 Characteristics of Job Corps Trainees Entering Service - Age in Years at Job Corps Entry	III-12
26 Ages at Entry Into the Military During 1971-1979, Job Corps and Total Non-Prior Service NPS Accessions - Data are Cumulative Percentages	III-13
27 Characteristics of Job Corps Entering Service - Race	III-15
28 Highest Year of Education Among Job Corps Entrants to the Military During 1971-1979 - by Racial Group	III-16
29 Highest Year of Education Among Job Corps Entrants to the Military During 1971-1979 - by White and Minority - Data are Cumulative Percentages (N=36,778; Data are From Job Corps Files)	III-17
30 Characteristics of Job Corps Trainees Entering Service - by Placement Status After Leaving Job Corps and by Educational Level	III-19
31 Characteristics of Job Corps Trainees Entering Service - Reading Level Test Score, and Approximate Reading Grade Level	III-21
32 Mental Group Percentages for Job Corps and Non-Prior Service Male Entrants to the Military	III-22
33 Characteristics of Job Corps Trainees Entering Service - Job Corps Occupational Cluster Codes	III-23
34 Characteristics of Job Corps Trainees Entering Service - Number of Days Stayed in Job Corps	III-25
35 Characteristics of Job Corps Trainees Entering Service - Census Region	III-27

LIST OF TABLES (Continued)

	<u>Page</u>
36 Characteristics of Job Corps Trainees Entering Service - Size of Enrollee's Home Town	III-29
37 AID3 Analysis of Military Enlistment Using Selected Job Corps Variables as Predictors	III-31
38 Enlistment of Job Corps Trainees in the Military: Regression Results Using Job Corps Variable as Predictors	III-32
39 Characteristics of Job Corps Trainees Entering Military Service Who Successfully Completed First Three Years of Active Duty - Year of Entry Into Job Corps	IV-2
40 Characteristics of Job Corps Trainees Entering Military Service Who Successfully Completed First Three Years of Active Duty - Year of Terminating Job Corps Participation	IV-4
41 Characteristics of Job Corps Trainees Entering Military Service Who Successfully Completed First Three Years of Active Duty - Reason for Leaving Job Corps	IV-6
42 Characteristics of Job Corps Trainees Entering Military Service Who Successfully Completed First Three Years of Active Duty - Age in Years at Entry	IV-7
43 Characteristics of Job Corps Trainees Entering Military Service Who Successfully Completed First Three Years of Active Duty - Race	IV-9
44 Characteristics of Job Corps Trainees Entering Military Service Who Successfully Completed First Three Years of Active Duty - Reading Level Test Score - and Approximate Reading Grade Level	IV-10
45 Characteristics of Job Corps Trainees Entering Military Service Who Successfully Completed First Three Years of Active Duty - Number of Days Stayed in Job Corps	IV-12
46 Characteristics of Job Corps Trainees Entering Military Service Who Successfully Completed First Three Years of Active Duty - Job Corps Occupational Cluster Codes	IV-14
47 Characteristics of Job Corps Trainees Entering Military Service Who Successfully Completed First Three Years of Active Duty - Placement Status After Leaving Job Corps, and by Educational Level	IV-15

LIST OF TABLES (Continued)

	<u>Page</u>
48 Characteristics of Job Corps Trainees Entering Military Service Who Successfully Completed First Three Years of Active Duty - Census Region	IV-17
49 Characteristics of Job Corps Trainees Entering Military Service Who Successfully Completed First Three Years of Active Duty - Size of Enrollee's Home Town	IV-18
50 Rate of Entrance and Rate of Success in the Military - Results of an AID3 Analysis	IV-20
51 Percent Successful in the First Three Years of Service: Job Corps Completion and Military Screening Variables as Predictors	IV-22

LIST OF APPENDICES

- Appendix A: Mean AFQT Scores for FY77 NPS Male Accessions, by Separate Service
- Appendix B: Racial Trends for NPS Male Accessions by Fiscal Year of Entry and Educational Level, by Separate Service
- Appendix C: Job Corps File Description
- Appendix D: Defense Manpower Data Center Cohort File Description
- Appendix E: States in the Various Census Regions
- Appendix F: Mean AFQT Scores by Year of Entry and by Education and Service
- Appendix G: Mean ASVAB Subtest scores for FY77 NPS Male Accessions - by Educational Level and Branch of Service
- Appendix H: Paygrade Distributions for CY77 NPS Male Accessions on Active Duty 30 Sept 1979 - by Educational Level, AFQT Category, and Service
- Appendix I: Initial Distribution List

CHAPTER I

INTRODUCTION

The purpose of the research described in this report was to address the relationships between civilian educational experiences (including educational attainments such as high school graduation or receipt of a General Educational Development certificate) and behavior in the military service. The Armed Forces provide the largest "job training" system in the United States. If one wants to begin to understand the relationships of the skills and knowledge acquisition process, and the credentials accompanying such acquisition, with subsequent job performance and behavior, data bases available through the Department of Defense (DoD) represent a unique resource. The research reported here used DoD data files to examine the performance in the military of non-high school graduates, General Educational Development (GED) certificate holders, and high school diploma graduates. Additionally, the characteristics and performances of Job Corps personnel entering the military are described.

Background

There is scant information today on the demand in various occupational fields for levels of literacy skills: reading, computation, writing, speaking, and listening. Thus, credentials requirements for study in different career education programs may be unnecessarily high or low, or they may be altogether unnecessary. And in job training programs, it is extremely hard, and rarely attempted, to demonstrate the relationship between the credential requirement for the skills, and the actual skills levels demanded by the job training. Nor are credentials requirements

often validated against performance measures of achievement in and after the training program (Sticht, 1975).

About one-third of the 750,000 students who drop out of school each year will later earn a high school equivalency certificate through the General Educational Development (GED) Program. Considering its importance, it is surprising that relatively little information is available concerning the program.

This lack of information results, perhaps, from the relative decentralization of the program and its management, as well as the high cost of longitudinal tracking studies for program participants and controls. For these reasons, the availability of data describing performance during military service offered considerable potential for evaluating the usefulness of the GED credential. The research described here provides performance information for the large group of individuals who achieve a GED certificate prior to enlistment in the military.

Over the past decade, educational credentials have become increasingly significant in determining enlistment eligibility. High school diploma graduates have become the preferred recruitment source, since there is considerable evidence that the performance and behavior of this group is superior, on average, to that of non-high school graduates -- even after controlling for differences in aptitude level (Cooper, 1977). Applicants for enlistment who attain a GED certificate, until recently, were considered as high school diploma graduates for recruitment purposes. Evidence began to accumulate, however, that enlistees with GED certificates behaved more like high school dropouts than diploma graduates, and this led to a sharp decline in the recruitment of GED-holders from over 24,000 in FY 75 to about 14,000 in FY 78. However, the percentage of GEDs among new recruits remained relatively constant.

Although there was a decrease in efforts to enlist GED holders, during the last five years more than 100,000 of the 600,000 high school dropouts entering service had attained a GED certificate prior to enlistment. Demographic, aptitude, and military service performance data are available on an individual basis for this population, as well as for those entering service as high school diploma graduates. In general, the research reported here describes the performance in service of GED certificate-holders compared with other high school dropouts, as well as with those who achieved a high school diploma.

Study Plan

Three separate studies were designed, but two conducted, using data describing male and female recruits enlisting in the military during the period fiscal year 1973 to fiscal year 1979. Recruits entering the services in more recent years, i.e., 1978-1981, were not always included in the study, because their performance data, such as paygrade attainment, would not yet be mature.

GED Study. This study compared high school diploma graduates, GED certificate-holders, and other non-high school graduates with respect to behavioral and performance criteria available during initial tours of active duty. Predictor data were obtained from data files containing information on all enlisted accessions. Criterion variables were obtained from DoD historic data bases that show the status of active duty personnel every calendar quarter. Criteria included attrition, advancement, and retention information available in these records at the one, two, three, and four-year service marks. Analyses were performed separately by sex, race, and aptitude level.

Job Corps Experiences Study. This study evaluated military service outcomes for those individuals who received their GED certificates after participation in Job Corps training. Job Corps data served as additional predictors of military performance in this study. These data included reading grade level, completion of Job Corps Training, and other pertinent variables.

Educational Experiences Study. In this study, it was planned to relate automated GED records maintained in a state educational agency's data system to military performance criteria. Successful and unsuccessful enlistees were to be identified and a search made of GED records maintained at testing sites throughout the state. This search would have provided information to show whether or not educational experiences associated with the attainment of a GED certificate are differentially predictive of military service outcomes. It was expected that Adult Basic Education program data would have been identified and included in this study. Unfortunately, these data were not available for use in this study. There were two reasons for this: First, two of the states contacted by letter, Texas and New York, responded that they did not maintain files of the data required by the study. Another state contacted, Virginia, correctly pointed out that study clearance would need to be obtained if legally mandated privacy requirements were to be satisfied. Subsequent conversations with officials in Washington, D.C., led to the conclusion that it would be very difficult to fulfill the objectives of the educational experiences study given privacy guidelines.

Background of the GED

Not all young adults complete a regular high school curriculum and receive a high school diploma. The General Educational Development Testing Service provides a means for evaluating and recognizing the educational experiences of these individuals who did not complete a regular high school program.

The GED testing program began in 1942. Tests were developed to assess the major educational objectives associated with a high school education. The GED tests have been widely accepted by the educational community as means for awarding high school certificates. All fifty states, the District of Columbia, six U.S. Territories or Possessions, and Canadian Provinces and/or Territories now administer the tests. The GED testing Service of the American Council on Education administers the GED tests at about 2,800 testing centers. In 1979, over one-half million adults took all five GED tests for the first time.¹

Background of the Job Corps

The Job Corps was established in the early 1960s as part of President Lyndon Johnson's war on poverty program. The Job Corps program was designed to take young men and women 16-21 years of age who had quit school after the fifth grade and provide them with job skills for entry level jobs as welders, retail clerks, automobile mechanics, etc. Conservation camps, often located on old Army posts, provided basic schooling, along with work and citizenship training.

Job Corps training centers operated in urban areas by private industry, e.g., Ford and Litton, or by state agencies or universities, focused on developing entry level job skills. The legislation establishing the Job Corps was written so as to encourage a variety of contracting arrangements. This was done so the

¹ The material here was drawn from: Who Takes the GED Tests?, by Andrew G. Malizio and Douglas R. Whitney, GED Testing Service, American Council on Education, Research Studies, No. 1, March 1981.

government could determine which arrangements were most efficient.

In 1973, the Comprehensive Employment and Training Act (CETA) was enacted, and the Job Corps was consolidated under Title IV of CETA. In 1977, President Carter expanded the Job Corps by doubling its training capacity from 22,000 to 44,000 positions. Also in 1977, the Departments of Labor (DoL) and Defense (DoD) signed a memorandum of understanding concerning linkage between the Job Corps and enlistment in the military. This understanding stated that DoL would provide DoD with a mechanism for screening and selection of potential enlistees, and DoD would refer young people rejected for military service to the DoL for possible enrollment in the Job Corps. The memorandum stated that the programs would be evaluated by both Departments at specific time intervals after its initiation.

Perspective

The reader will find in this report a comprehensive examination of the performances in the military of non-high school graduates, GED holders, and high school diploma graduates. Policymakers are urged to remember that the results reported here are influenced not only by differences in educational accomplishment, but also by enumerable other factors, e.g., military personnel policies, and social and economic conditions and policies. Because the influences of these factors are intertwined with the data, any conclusions about differences among the three educational attainment groups must be treated as tentative, as the data and conclusions might have been different if those policies or conditions had been different. This study utilizes historical data from a large and complex organization (the military). The data are not from experiments, so causal inferences cannot be drawn from the analyses. Additionally, although much of the data appears "hard", e.g., attrition from the military, the variables measured may seem far from performance measures and

subject to a variety of other sources of variance, e.g., differential assignment policies for individuals with different educational pedigrees, the impact of labeling an individual as belonging to a particular category, etc.

It was not the purpose of this report to debunk or establish the relative superiority or inferiority of any of the three levels of educational accomplishment investigated. The reader will find that some data in the report will push in favor of one type of educational accomplishment, while other data may suggest the superiority of another type of educational accomplishment. Chapter V attempts to summarize the key findings of this report.

The next chapter of this report describes the results of the GED study. As is the case with Chapter III and IV, Chapter II includes many data tables. If there is a discussion of the data in a table, the discussion is usually on the pages nearest the table. This organization has been followed to the extent practical in order to facilitate reading of the report.

CHAPTER II

THE PERFORMANCE OF GED CERTIFICATE HOLDERS IN THE MILITARY

The data presented in this chapter address the number of accessions (enlistments) in the military, by fiscal year, and by pre-enlistment educational category (non-high school graduate, GED-certificate holder, or high school graduate).¹ Data concerning GED holders who entered the military after Job Corps training are not discussed in this chapter; these data are presented in Chapters III and IV of this report.

The group of individuals in each of the educational attainment categories are then described in terms of chronological age, race, geographic regions from which they enlisted, and scores on the services' enlistment screening mental test. Criterion (performance) information is then given for the different groups. The criterion measures include attrition from the military (as used in this report, attrition means an individual did not successfully complete his or her first enlistment contract), retention in the military (successful completion of more than four years in the military), and paygrade attainment.

The data in this report are from males only. The services had enlisted so few women who had not finished high school prior to enlistment, that analyses of data from women GED holders were not warranted.

Table 1 displays the number and percent on non-prior service (NPS) male GED accessions (new enlistees), by branch of service and fiscal year of enlistment.

¹ Throughout this report, GEDs are considered separately from other non-high school graduates.

TABLE 1. NUMBER AND PERCENT OF NON-PRIOR SERVICE MALE GED
ACCESSIONS BY SERVICE AND FISCAL YEAR OF ENTRY ^{a,b}

NUMBER						
<u>SERVICE</u>	<u>FISCAL YEAR OF ENTRY</u>					
	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
DoD	18830	24350	22731	18862	14353	17212
ARMY	8880	13293	8117	5101	3700	6450
NAVY	4857	3623	6821	6825	4435	4128
MARINE CORPS	1991	3682	3823	2439	627	585
AIR FORCE	3102	3752	3970	4497	5591	6049

PERCENT OF ACCESSIONS ^a						
<u>SERVICE</u>	<u>FISCAL YEAR OF ENTRY</u>					
	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
DoD	5.3	6.4	6.2	5.3	5.3	6.3
ARMY	5.3	8.0	4.9	3.3	3.5	5.8
NAVY	6.6	3.9	7.8	7.1	6.0	5.9
MARINE CORPS	4.3	6.5	7.7	5.6	1.7	1.5
AIR FORCE	4.7	5.7	6.2	7.2	10.0	11.4

- a. Percent of non-prior service male accessions who were GED holders, e.g., in fiscal year 1974, 5.3% of the non-prior service males enlisted in the Army were GED holders. "Accessions" means new enlistees.
- b. These data are from the Office of the Secretary of Defense; not from the Defense Manpower Data Center cohort file.

The percentage of total Department of Defense (DoD) NPS male accessions that were GED holders has remained quite constant during the period fiscal year 1974 - fiscal year 1979, varying only from a low of 5.3% to a high of 6.4%. Within the rather constant total DoD percentages, however, variation exists among years within each of the services. The percentage of GEDs among the accessions entering the Marine Corps varied from a low of 1.7% in fiscal 1978 to a high of 7.7% in fiscal 1976. The low percentages for GED enlistments in the Marine Corps occurred in fiscal years 1978 and 1979; the same years in which the percentage of GEDs among new enlistees in the Air Force rose to 10% and 11.4%, respectively.

The numbers of NPS male GED certificate holders enlisted in the military ranged from a low of 14,353 in fiscal year 1978 to a high of 24,350 in fiscal year 1975. During the six years covered by this study, the services enlisted over 116,000 non-prior service male GED certificate holders.

Table 2 displays the percentages of DoD non-prior service male accessions by educational level for the fiscal years 1974-1979. The data in Table 2 indicate that, as shown in Table 1, the percentage of GEDs among the NPS male accessions has remained quite constant. The data in Table 2 show, however, an upward trend in the percentage of NPS males who are high school graduates, and a downward trend in the percentage who were neither GED holders nor high school graduates, i.e., a downward trend in the percentage of NPS accession who were non-high school graduates.

Table 3 displays scores on the Armed Forces Qualification Test (AFQT). The AFQT is a paper-and-pencil aptitude test administered prior to enlistment. The AFQT score is formed by combining scores on four subtests: word knowledge, paragraph comprehension, arithmetic reasoning, and numerical operations. The distribution of AFQT scores is divided into mental categories as

TABLE 2. PERCENT OF DoD NON-PRIOR SERVICE MALE ACCESSIONS
BY EDUCATIONAL LEVEL AND FISCAL YEAR OF ENTRY ^a

<u>FISCAL YEAR</u>	<u>GED</u>	<u>NON-HIGH SCHOOL GRADUATE</u>	<u>HIGH SCHOOL GRADUATE</u>	<u>TOTAL</u>
1974	5.3	36.4	58.3	100.0
1975	6.4	29.9	63.7	100.0
1976	6.2	26.9	66.9	100.0
1977	5.3	27.2	67.5	100.0
1978	5.3	19.6	75.1	100.0
1979	6.3	23.7	70.0	100.0

- a. These data are from the Office of the Secretary of Defense; not from the Defense Manpower Data Center cohort files.

TABLE 3. TRENDS IN ARMED FORCES QUALIFICATION TEST (AFQT) SCORES
FOR NON-PRIOR SERVICE MALE ACCESSIONS BY FISCAL YEAR OF
ENTRY AND EDUCATIONAL LEVEL

- PERCENTAGE DISTRIBUTIONS ON A DoD BASIS - a

NON-HIGH SCHOOL GRADUATES (NHS)

AFQT Category	Fiscal Year of Entry						
	1973	1974	1975	1976	1977	1978	1979
I and II	20	20	21	26	16	22	17
III A	23	26	28	26	26	35	28
III B	39	40	44	46	56	42	53
IV	18	14	07	02	02	01	02
TOTAL	100	100	100	100	100	100	100

GED CERTIFICATE HOLDERS (GED)

AFQT Category	Fiscal Year of Entry						
	1973	1974	1975	1976	1977	1978	1979
I and II	29	23	28	35	32	31	24
III A	29	29	30	27	30	39	38
III B	31	39	35	29	31	29	37
IV	11	09	07	09	07	01	01
TOTAL	100	100	100	100	100	100	100

HIGH SCHOOL GRADUATES (HS)

AFQT Category	Fiscal Year of Entry						
	1973	1974	1975	1976	1977	1978	1979
I and II	42	40	41	43	39	34	31
III A	23	24	26	25	24	27	26
III B	24	27	27	25	29	31	34
IV	11	09	06	07	08	08	09
TOTAL	100	100	100	100	100	100	100

TOTAL

AFQT Category	Fiscal Year of Entry						
	1973	1974	1975	1976	1977	1978	1979
I and II	34	32	34	38	33	31	27
III A	23	25	27	25	25	29	28
III B	29	32	32	32	36	34	39
IV	14	11	07	05	06	06	04
TOTAL	100	100	100	100	100	100	100

a. Data are from the Office of Secretary of Defense; not from the Defense Manpower Data Center's cohort file.

follows:

<u>Mental Category</u>	<u>AFQT Score Range</u>
I	93-100
II	65-92
IIIA	49-64
IIIB	31-48
IV	10-30

The data in Table 3 are for total DoD; the same data for the separate services are provided in Appendix A to this report.

The data in Table 3 reveal that GED holders and high school graduate NPS male accessions during fiscal years 1973-1974 were more likely to have from mental groups I, II, or IIIA than were the non-high school graduate accessions. A greater percentage of the high school graduate accessions scored in mental group IV than was the case for either the GED or the non-high school graduate groups; particularly in fiscal years 1978 and 1979. This probably reflects service policy to exclude from enlistment mental group IV GEDs or non-high school graduates.

Table 4 shows average (arithmetic mean) AFQT scores by educational credential and by fiscal year for DoD NPS male accessions. (Appendix F has AFQT scores by service, level of education, and year of enlistment.) The results show that the average AFQT for non-high school graduates was each year lower than the average AFQT score of either the GED certificate holders or the high school graduates. The average AFQT scores of the GED holders have in recent years (1978-1979) exceeded not only those of the non-high school graduates, but also those of the high school graduates.

Table 5 displays the proportions of blacks and non-blacks entering the services, by year of enlistment, and by pre-enlistment educational level. (Data for the separate military services are included in Appendix B to this report.)

TABLE 4. MEAN ARMED FORCES QUALIFICATION TEST (AFQT) SCORES
FOR DoD NON-PRIOR SERVICE MALE ACCESSIONS
- BY EDUCATIONAL LEVEL AND FISCAL YEAR OF ENTRY -^a.

<u>FISCAL YEAR OF ENTRY</u>	<u>GED</u>	<u>NON-HIGH SCHOOL GRADUATE</u>	<u>HIGH SCHOOL GRADUATE</u>
1973	54.6	47.4	59.3
1974	51.6	48.1	58.3
1975	53.8	50.0	59.4
1976	56.6	53.4	60.4
1977	56.9	50.0	59.0
1978	59.0	53.7	56.6
1979	56.6	51.0	55.3

- a. AFQT scores are sometimes classified by mental group: Mental Group I: 93-100; Mental Group II: 65-92; Mental Group III: 31-64; and Mental Group IV: 10-30. AFQT scores are formed by combining scores from four subtests: word knowledge, paragraph comprehension, arithmetic reasoning, and numerical operations.

TABLE 5. RACIAL TRENDS FOR NON-PRIOR SERVICE MALE ACCESSIONS
BY FISCAL YEAR OF ENTRY AND EDUCATIONAL LEVEL
- PERCENTAGE DISTRIBUTION ON A DoD BASIS -^a

RACE	NHS						
	FISCAL YEAR OF ENTRY						
	1973	1974	1975	1976	1977	1978	1979
BLACK	19	24	20	17	21	21	26
OTHER	81	76	80	83	79	79	74
TOTAL	100	100	100	100	100	100	100

RACE	GED						
	FISCAL YEAR OF ENTRY						
	1973	1974	1975	1976	1977	1978	1979
BLACK	16	16	16	14	15	12	16
OTHER	84	84	84	86	85	88	84
TOTAL	100	100	100	100	100	100	100

RACE	HS						
	FISCAL YEAR OF ENTRY						
	1973	1974	1975	1976	1977	1978	1979
BLACK	16	20	18	18	21	25	28
OTHER	84	80	82	82	79	75	72
TOTAL	100	100	100	100	100	100	100

RACE	TOTAL						
	FISCAL YEAR OF ENTRY						
	1973	1974	1975	1976	1977	1978	1979
BLACK	17	21	18	17	21	24	26
OTHER	83	79	82	83	79	76	74
TOTAL	100	100	100	100	100	100	100

- a. Data are from the Office of the Secretary of Defense; not from the Defense Manpower Data Center's cohort files.

Of the NPS males who were GEDs when they enlisted, a rather steady percentage has been black over the years studied. In 1978, 12% of the GEDs enlisted were black, while in 1973, 1974, 1975, and 1979, 16% of the GEDs enlisting in the military were black. GED holders are underrepresented among black enlistees, as can be seen by comparing the "GED" and "Total" portions of Table 5. (In 1979, for instance, blacks comprised 26% of the NPS males enlisting, but only 16% of the enlistees holding GEDs.)

Tables 6a-6d extend over four pages and give age trends for NPS males by fiscal year of entry, and by educational level.

Table 6c reveals that the typical high school graduate enlistee was 18 years old in each of the years FY73-79. The data in Tables 6a and 6b indicate that the services apparently moved away from recruiting 17 year old GED holders or non-high school graduates in the latter years of the decade of the 70s. For non-high school graduates, for instance, the data in Table 6b indicate that 18 was the modal years of age of non-high school graduates in FY78 and FY79.

The data in Tables 6a-6b also show that the preponderance of the military's NPS male recruits were between 17-20 years of age during each of the years in the period FY73-FY79.

Table 7 displays the Armed Services Vocational Aptitude Battery (ASVAB) subtest scores for FY77 NPS male accessions, by educational level. (Data for the separate services are given in Appendix G.)

Two trends in the data in Table 7 are noteworthy. First, the average ASVAB subtest scores of both the GED group and the high school graduate group exceed those of the non-high school graduate groups. Second, while the average scores of the high school graduates are above those of the GED group on the academically oriented subtests (e.g., general information,

TABLE 6a. AGE TRENDS FOR NON-PRIOR SERVICE MALE ACCESSIONS
BY FISCAL YEAR OF ENTRY AND EDUCATIONAL LEVEL

- PERCENTAGE DISTRIBUTIONS ON A DoD BASIS -

AGE IN YEARS	GED						
	FISCAL YEAR OF ENTRY						
	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
23+	4.6	5.5	6.9	8.0	10.0	9.1	9.1
22	2.7	2.6	3.5	4.2	4.9	4.2	4.4
21	6.0	4.4	5.6	6.4	6.7	6.4	6.5
20	10.8	7.9	9.2	9.8	10.6	9.7	10.1
19	18.0	14.3	14.8	16.8	18.1	17.0	17.5
18	26.4	27.1	25.0	29.0	27.7	28.6	31.2
17	<u>31.5</u>	<u>38.2</u>	<u>35.0</u>	<u>25.8</u>	<u>22.0</u>	<u>25.0</u>	<u>21.2</u>
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0
MEAN AGE	18.6	18.5	18.7	19.0	19.2	19.1	19.1

TABLE 6B. AGE TRENDS FOR NON-PRIOR SERVICE MALE ACCESSIONS
BY FISCAL YEAR OF ENTRY AND EDUCATIONAL LEVEL
- PERCENTAGE DISTRIBUTIONS ON A DoD BASIS -

AGE IN YEARS	NON-HIGH SCHOOL GRADUATES						
	FISCAL YEAR OF ENTRY						
	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
23+	2.1	3.2	3.7	3.9	4.0	3.8	4.8
22	1.3	1.9	2.2	2.2	2.2	2.0	2.5
21	1.6	3.4	3.7	3.7	3.5	3.6	4.3
20	6.7	6.4	7.0	6.3	6.1	6.7	7.6
19	14.6	13.3	13.5	13.0	13.8	15.3	16.7
18	31.4	32.8	31.8	31.1	30.4	35.4	39.8
17	<u>41.3</u>	<u>39.0</u>	<u>38.1</u>	<u>39.8</u>	<u>40.0</u>	<u>33.2</u>	<u>24.3</u>
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0
MEAN AGE	18.1	18.2	18.3	18.3	18.3	18.4	18.6

TABLE 6c. AGE TRENDS FOR NON-PRIOR SERVICE MALE ACCESSIONS
BY FISCAL YEAR OF ENTRY AND EDUCATIONAL LEVEL
- PERCENTAGE DISTRIBUTIONS ON A DoD LEVEL -

AGE IN YEARS	HIGH SCHOOL GRADUATES						
	FISCAL YEAR OF ENTRY						
	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
23+	3.5	4.9	7.1	8.0	8.9	8.9	8.4
22	4.0	4.0	4.6	4.8	4.5	4.3	4.2
21	6.0	6.4	7.5	7.4	6.6	6.6	6.4
20	16.4	12.2	12.9	12.0	11.1	11.3	11.1
19	27.6	24.2	22.9	22.6	21.8	22.1	22.2
18	33.5	37.2	35.1	36.3	37.2	37.7	38.9
17	<u>9.0</u>	<u>11.1</u>	<u>9.9</u>	<u>8.9</u>	<u>9.9</u>	<u>9.1</u>	<u>8.8</u>
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0
MEAN AGE	19.0	19.0	19.2	19.3	19.3	19.3	19.2

TABLE 6d. AGE TRENDS FOR NON-PRIOR SERVICE MALE ACCESSIONS
BY FISCAL YEAR OF ENTRY AND EDUCATIONAL LEVEL
- PERCENTAGE DISTRIBUTIONS ON A DoD BASIS -

AGE IN YEARS	TOTAL						
	FISCAL YEAR OF ENTRY						
	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
23+	3.0	4.3	6.0	6.7	7.6	7.8	7.5
22	3.0	3.2	3.8	4.0	3.9	3.8	3.8
21	4.8	5.1	6.2	6.2	5.8	5.9	5.8
20	13.0	9.8	10.8	10.2	9.7	10.2	10.1
18	32.6	35.1	33.5	34.5	34.9	36.8	38.7
17	<u>20.6</u>	<u>22.9</u>	<u>20.2</u>	<u>18.9</u>	<u>18.6</u>	<u>15.2</u>	<u>13.6</u>
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0
MEAN AGE	18.7	18.7	18.9	19.0	19.0	19.1	19.1

TABLE 7. MEAN ARMED SERVICE VOCATIONAL APTITUDE BATTERY (ASVAB)
 SCORES FOR FY77 DoD NON-PRIOR SERVICE MALE ACCESSIONS
 - BY EDUCATION LEVEL -

<u>ASVAB SUBTEST</u>	<u>DoD</u>		
	<u>GED</u>	<u>NON-HIGH SCHOOL GRADUATE</u>	<u>HIGH SCHOOL GRADUATE</u>
General Information	9.6	8.6	9.9
Numerical Operations	30.1	28.0	32.1
Attention to Detail	14.1	13.9	14.7
Word Knowledge	20.1	17.9	20.5
Arithmetic Reasoning	12.9	11.6	13.2
Spacial Perception	12.6	12.3	12.5
Math Knowledge	11.0	9.5	12.2
Electrical Information	19.7	17.9	19.7
Mechanical Comprehension	11.1	9.8	11.1
General Science	11.2	9.7	11.7
Shop Information	14.1	13.2	13.9
Automotive Information	12.2	10.8	11.9

numerical operations, math knowledge, word knowledge, general science, and attention to detail), the average scores for the GED group on vocationally oriented subtests (e.g., spatial perception, electrical information, mechanical comprehension, shop information, and automotive information) equal or exceed the average scores of the high school graduate accessions. The higher average scores of GEDs may well reflect the impact of service selection policies.

Tables 8a-8c and 9 display geographic trends in NPS male accessions in the period FY74-FY79. Census areas are used to represent geographic regions. During the years concerned, the South provided the greatest percentage of NPS male accession in total, and for each of the three educational levels (GED, non-high school graduate, and high school graduate). The South produced, depending upon the year, 36.3% to 42.8% of the NPS male GED accessions. About twice as many NPS male GED accessions have been coming from the South as from either the Northeast or the North Central geographic regions. The West has been second to the South in producing the greatest number of NPS male GED military accessions.

Table 10, which covers two pages, displays the military occupational assignments for NPS male accessions entering all of the services during FY76-FY78. The table shows the percentage distributions of occupational assignments for each of the three educational levels, and for the total population of NPS male accessions during those years.

The data reveal that the largest percentage of NPS male enlistees were assigned to electrical/mechanical equipment repair. Of the total number of such accessions, over 25% of them were assigned to electrical/mechanical repair occupations. The electrical/mechanical repair occupations category was the modal assignment for both GEDs and high school graduates.

TABLE 8a. GEOGRAPHIC TRENDS BY CENSUS AREA FOR NON-PRIOR SERVICE MALE
ACCESSIONS BY FISCAL YEAR OF ENTRY AND EDUCATIONAL LEVEL
- PERCENTAGE DISTRIBUTIONS ON A DoD BASIS

GEOGRAPHIC REGION	GED				
	1973	1974	1975	1976	1977
North East New England Mid-Atlantic	10.1 (3.1) (7.0)	10.8 (3.8) (6.9)	13.7 (3.9) (9.7)	13.8 (3.9) (9.9)	12.7 (3.6) (9.0)
				14.2 (5.1) (9.2)	17.8 (5.2) (12.6)
North Central East North Central West North Central	19.5 (14.0) (5.4)	20.4 (14.9) (5.5)	19.8 (12.4) (7.4)	20.9 (13.1) (7.8)	22.2 (14.4) (7.8)
				18.8 (10.5) (8.3)	18.3 (10.6) (7.8)
South South Atlantic East South Central West South Central	40.4 (14.3) (7.3) (18.8)	40.8 (14.2) (7.1) (19.4)	42.8 (14.4) (8.6) (19.8)	36.3 (12.1) (6.8) (17.4)	36.8 (13.2) (7.9) (15.7)
				37.9 (14.5) (7.9) (15.5)	38.3 (14.0) (8.1) (16.3)
West Mountain Pacific	29.4 (6.4) (23.0)	27.3 (6.5) (20.8)	22.8 (8.7) (14.2)	27.8 (9.4) (18.4)	27.0 (8.9) (18.0)
				27.6 (9.3) (18.4)	23.6 (8.5) (15.2)
Other	.6	.8	.9	1.1	1.2
Total	100.0	100.0	100.0	100.0	100.0

TABLE 86. GEOGRAPHIC TRENDS BY CENSUS AREA FOR NON-PRIOR SERVICE MALE
ACCESSIONS BY FISCAL YEAR OF ENTRY AND EDUCATIONAL LEVEL
- PERCENTAGE DISTRIBUTIONS ON A 100 BASIS -

GEOGRAPHIC REGION	NON-HIGH SCHOOL GRADUATE					
	1973	1974	1975	1976	1977	1978
North East	17.9	17.0	21.4	19.8	21.3	19.5
New England	(4.3)	(4.0)	(4.8)	(4.9)	(5.5)	(5.1)
Mid-Atlantic	(13.6)	(13.0)	(16.6)	(14.9)	(15.8)	(14.4)
North Central	26.5	25.3	27.6	30.4	29.8	29.2
East North Central	(19.2)	(18.4)	(20.3)	(21.9)	(21.5)	(21.5)
West North Central	(7.3)	(6.9)	(7.3)	(8.5)	(8.2)	(7.7)
South	38.7	40.7	33.1	31.0	30.6	34.3
South Atlantic	(18.2)	(20.1)	(15.8)	(14.0)	(14.3)	(17.4)
East South Central	(8.4)	(8.9)	(6.5)	(6.0)	(6.4)	(6.7)
West South Central	(12.0)	(11.7)	(10.9)	(11.0)	(9.9)	(10.2)
West	16.2	16.2	17.3	18.4	17.8	16.4
Mountain	(4.4)	(4.8)	(4.7)	(4.9)	(4.8)	(4.4)
Pacific	(11.8)	(11.4)	(12.6)	(13.5)	(13.0)	(12.1)
Other	.7	.8	.6	.3	.4	.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 8c. GEOGRAPHIC TRENDS BY CENSUS AREA FOR NON-PRIOR SERVICE MALE
ACCESSIONS BY FISCAL YEAR OF ENTRY AND EDUCATIONAL LEVEL
- PERCENTAGE DISTRIBUTIONS ON A DOJ BASIS -

GEOGRAPHIC REGION	HIGH SCHOOL GRADUATE						
	1973	1974	1975	1976	1977	1978	1979
North East	18.3	18.0	19.6	21.8	22.8	22.4	21.8
New England	(4.8)	(4.8)	(5.4)	(6.0)	(6.1)	(5.9)	(5.7)
Mid-Atlantic	(13.5)	(13.1)	(14.3)	(15.7)	(16.7)	(16.5)	(16.1)
North Central	27.6	25.5	26.5	27.3	25.5	23.7	23.2
East North Central	(18.2)	(17.0)	(18.2)	(19.6)	(18.3)	(16.8)	(16.6)
West North Central	(9.4)	(8.5)	(8.3)	(7.7)	(7.2)	(6.8)	(6.6)
South	33.6	34.6	33.7	31.6	33.0	36.9	37.7
South Atlantic	(15.7)	(16.5)	(16.8)	(16.4)	(18.0)	(20.4)	(21.5)
East South Central	(6.5)	(6.7)	(6.3)	(6.1)	(6.3)	(6.8)	(7.1)
West South Central	(11.5)	(11.4)	(10.6)	(9.1)	(8.7)	(8.7)	(9.1)
West	19.7	20.7	19.1	18.2	17.4	15.9	15.1
Mountain	(5.0)	(5.2)	(5.3)	(4.8)	(4.7)	(4.6)	(4.6)
Pacific	(14.7)	(15.4)	(13.9)	(13.3)	(12.7)	(11.2)	(10.5)
Other	.6	1.2	1.0	1.2	1.2	1.9	1.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3. GEOGRAPHIC TRENDS BY CENSUS AREA FOR NON-PRIOR SERVICE MAIL
ACCESSIONS BY FISCAL YEAR OF ENTRY TOTAL
- PERCENTAGE DISTRIBUTIONS ON A DOB BASIS -^a

GEOGRAPHIC REGION	TOTAL				
	1973	1974	1975	1976	1977
North East	18.0	17.3	19.9	20.8	22.0
New England	(4.6)	(4.5)	(5.1)	(5.6)	(5.8)
Mid-Atlantic	(13.4)	(12.8)	(14.8)	(15.2)	(16.2)
North Central	27.1	25.2	26.5	27.9	26.6
East North Central	(18.5)	(17.4)	(18.6)	(20.0)	(19.0)
West North Central	(8.6)	(7.8)	(7.9)	(7.9)	(7.5)
South	35.5	37.2	33.9	31.6	32.5
South Atlantic	(16.6)	(17.8)	(16.3)	(15.5)	(16.8)
East South Central	(7.2)	(7.5)	(6.5)	(6.1)	(6.4)
West South Central	(11.8)	(11.9)	(11.1)	(10.0)	(9.3)
West	18.7	19.3	18.7	18.7	17.8
Mountain	(4.8)	(5.1)	(5.3)	(5.0)	(4.9)
Pacific	(13.8)	(14.1)	(13.5)	(13.6)	(12.9)
Other	.7	1.0	.8	.9	1.0
Total	100.0	100.0	100.0	100.0	100.0

a. Appendix E shows the states in the census regions.

TABLE 10. MILITARY OCCUPATION PERCENTAGE DISTRIBUTIONS FOR FY70-FY72
NON-PRIOR SERVICE MALE ACCESSIONS BY EDUCATIONAL LEVEL

<u>DOD</u>				
<u>OCCUPATIONAL GROUP</u>	<u>GED</u>	<u>NHS</u>	<u>HSG</u>	<u>TOTAL</u>
0. INFANTRY, GUNCREWS, SEAMEN SPECIALISTS	24.8	34.8	19.6	23.4
Infantry	(11.6)	(17.9)	(9.2)	(11.4)
Armor & Amphibious	(2.4)	(3.5)	(1.7)	(2.2)
Combat Engineering	(1.9)	(4.4)	(1.7)	(2.3)
Artillery/Gunnery/Rockets Missiles	(5.3)	(7.8)	(4.0)	(4.9)
Air Crew	(.1)	(.0)	(.1)	(.1)
Seamanship	(1.1)	(.8)	(.8)	(.8)
Installation Security	(2.4)	(.5)	(2.1)	(1.7)
1. ELECTRONIC EQUIPMENT REPAIRMEN	7.3	3.5	10.1	8.5
Radio Radar	(3.1)	(1.6)	(4.7)	(3.9)
Fire Control Electrical System	(.5)	(.2)	(.6)	(.5)
Missile Guidance	(1.4)	(1.0)	(1.6)	(1.4)
Sonar Equipment	(.9)	(.2)	(.6)	(.5)
Nuclear Weapons Equipment	(.1)	(.0)	(.1)	(.1)
ADP Computers	(.2)	(.1)	(.4)	(.4)
Teletype, Cryptographic Equipment	(.4)	(.2)	(.7)	(.6)
Electronic Equipment	(.8)	(.3)	(1.4)	(1.1)
2. COMMUNICATIONS & INTELLIGENCE SPEC.	9.0	9.2	9.6	9.5
Radio & Radio Code	(3.3)	(4.4)	(3.2)	(3.5)
Sonar	(.2)	(.1)	(.3)	(.2)
Radar/Air Traffic Control	(2.1)	(1.1)	(1.8)	(1.6)
Signal Intell./Electronic Warfare	(.5)	(.2)	(1.4)	(1.1)
Intelligence	(.3)	(.4)	(.4)	(.4)
Combat Operations Control	(1.8)	(2.2)	(1.3)	(1.6)
Communications Ctr. Operations	(.8)	(.9)	(1.3)	(1.2)
3. MEDICAL & DENTAL SPECIALISTS	4.4	2.4	4.8	4.2
Medical Care	(3.7)	(2.2)	(3.5)	(3.2)
Technical Medical Services	(.2)	(.1)	(.6)	(.5)
Related Medical Services	(.1)	(.1)	(.2)	(.2)
Dental Care	(.4)	(.1)	(.5)	(.4)
4. OTHER TECHNICAL & ALLIED SPECIALISTS	1.8	1.4	2.3	2.1
Photography	(.2)	(.1)	(.3)	(.3)
Mapping/Surveying/Drafting/Illust.	(.6)	(.7)	(.5)	(.6)
Weather	(.2)	(.1)	(.3)	(.3)
Ordnance Disposal & Diving	(.0)	(.0)	(.0)	(.0)
Musicians	(.1)	(.1)	(.3)	(.3)
Technical Specialists, N.E.C.	(.8)	(.5)	(.8)	(.7)

TABLE 10. MILITARY OCCUPATION PERCENTAGE DISTRIBUTIONS FOR FY76-FY78
NON-PRIOR SERVICE MALE ACCESSIONS BY EDUCATIONAL LEVEL
(Continued)

<u>DoD</u>				
<u>OCCUPATIONAL GROUP</u>	<u>GED</u>	<u>NHS</u>	<u>HSG</u>	<u>TOTAL</u>
5. FUNCTIONAL SUPPORT & ADMINISTRATION	10.1	9.2	11.9	11.9
Personnel	(.9)	(.9)	(1.2)	(1.1)
Administration	(3.0)	(2.1)	(3.5)	(3.1)
Clerical/Personnel	(.2)	(.2)	(.1)	(.2)
Data Processing	(.3)	(.2)	(.6)	(.5)
Accounting/Finance/Disbursing	(.3)	(.2)	(.7)	(.6)
Functional Support	(5.2)	(5.6)	(5.4)	(5.4)
Religious, Morale, Welfare	(.2)	(.1)	(.2)	(.2)
Information	(.0)	(.0)	(.1)	(.1)
6. ELECTRICAL/MECHANICAL EQUIP. REPAIR	26.2	23.9	26.0	25.5
Aircraft	(10.5)	(5.2)	(10.6)	(9.3)
Automotive	(4.6)	(8.3)	(4.3)	(5.2)
Wire Communications	(2.7)	(3.6)	(2.6)	(2.9)
Missile Mechanical & Electrical	(.4)	(.2)	(.4)	(.4)
Armament & Munitions	(3.0)	(2.0)	(2.7)	(2.5)
Shipboard Propulsion	(3.5)	(2.8)	(3.0)	(3.0)
Power Generating Equipment	(1.3)	(1.5)	(2.2)	(2.0)
Precision Equipment	(.2)	(.1)	(.2)	(.1)
Other Mechanical & Electrical Equip.	(.1)	(.2)	(.1)	(.1)
7. CRAFTSMEN	5.6	3.7	5.0	4.7
Metalwork	(.8)	(.5)	(.8)	(.7)
Construction	(2.1)	(1.7)	(1.8)	(1.8)
Utilities	(1.3)	(.7)	(1.2)	(1.1)
Lithography	(.1)	(.1)	(.1)	(.1)
Industrial Gas & Fuel Production	(.0)	(.0)	(.0)	(.0)
Fabric/Leather/Rubber	(.2)	(.1)	(.2)	(.2)
Other Craftsmen	(1.1)	(.7)	(.9)	(.9)
8. SERVICE AND SUPPLY HANDLERS	10.8	12.0	10.9	11.1
Food Service	(3.0)	(4.0)	(2.3)	(2.7)
Motor Transport	(2.5)	(3.9)	(2.5)	(2.9)
Material Receipt/Storage/Issue	(2.5)	(1.9)	(2.1)	(2.1)
Law Enforcement	(2.2)	(1.5)	(3.4)	(2.9)
Personal Service	(.3)	(.2)	(.2)	(.2)
Auxiliary Labor	(.0)	(.0)	(.0)	(.0)
Forward Area Equipment	(.6)	(.4)	(.3)	(.4)
TOTAL	100.0	100.0	100.0	100.0

The second most frequent occupational assignment was to the infantry, gun crew, and seaman specialties. This combat-oriented occupational category was the one to which the largest percentage (34.8%) of the non-high school graduates was assigned.

The data in Table 11 portray the paygrade attainment of calendar year 1977 (CY-77) NPS male accessions, by branch of service and level of education (GED, non-high school graduate, or high school graduate). Paygrade attainment represents a measure of an individual's success in the military. Paygrade advancement depends upon performance as assessed by supervisory ratings and by scores on job knowledge tests.

(In Appendix H, paygrade attainment is shown for each service, by educational level and mental group.)

The data in Table 11 clearly show differences among the services in their promotion policies. While none of the CY-77 NPS male accessions into the Air Force on active duty on 30 September 1979 had been promoted to E-5, and only 10% had been promoted to E-4, 69% of the NPS male Army's accessions had been promoted to either E-4 or E-5. Comparable percentages for the Navy and Marine Corps were 43 and 34%, respectively.

Data in Table 11 reveal that, in terms of paygrade attainment, on average, high school graduates fared better than GEDs who, in turn, fared better than non-high school graduates. This pattern was true for each of the services. Table 11 shows that for the Army, the percentage of GED holders attaining E-4 or E-5 was nearly the same as the percentage of high school graduates attaining those pay grades. The difference between the percentage of high school graduates and the percentage of GEDs making E-4 or E-5 was greater in the Marine Corps and Navy than it was in the Army.

TABLE 11. PAY GRADE PERCENTAGE DISTRIBUTIONS FOR CY-77 NON-PRIOR SERVICE MALE ACCESSIONS ON ACTIVE DUTY 30 SEPTEMBER 1979 - BY EDUCATIONAL LEVEL AND SERVICE

	ARMY				NAVY				MARINE CORPS				AIR FORCE			
	GED	NHS	HS	TOT	GED	NHS	HS	TOT	GED	NHS	HS	TOT	GED	NHS	HS	TOT
E-5	7	1	4	3	2	0	4	4	2	1	3	2	0	0	0	0
E-4	63	60	69	66	27	15	39	34	22	15	31	27	8	7	10	10
E-3	24	30	24	26	47	51	45	46	59	63	59	60	87	88	89	88
E-2	3	5	2	3	16	24	9	12	11	13	5	7	3	3	1	1
E-1	3	4	1	2	8	10	3	4	6	8	2	4	2	2	0	1
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Mean	3.7	3.5	3.7	3.7	3.0	2.7	3.3	3.2	3.2	2.9	3.3	3.2	3.0	3.0	3.1	3.1

Table 12 presents data concerning attrition prior to completion of the first three years of active duty for FY73-76 NPS male accessions. Attrition refers to loss of an individual from the service prior to the completion of, in the case of Table 12, three years of active duty. As can be seen by examining the data in Table 12 by looking at the "causes for attrition", most individuals attrite for adverse reasons (as opposed to medical or dependency hardship reasons). In general, then, attrition data provide a measure of the performance of enlisted personnel in the military. The data in Table 12 indicate that behavior/performance is the modal cause for attrition in each service and for each of the educational levels.

Overall, 48.9% of the GEDs attrited prior to completion of the first three years of active duty. The attrition percentages for GEDs ranged from a low of 46.6% in the Marine Corps to 52.7% in the Air Force. In a phrase, about 50% of the NPS male GEDs had attrited by the end of three years of active duty.

The attrition rates for non-high school graduates and GEDs were very similar across the services, except for the Navy. In the Navy, the attrition rate for NPS male GEDs was over seven percent lower than that of non-high school graduates. It may be that this difference reflects the technological nature of the Navy, which places a premium on the ability to master complex equipment and instructions.

It should be noted that the loss rates for high school graduates were approximately one-half the loss rates for either the non-high school graduate or the GED groups. This relationship was roughly true for the total population, and for each of the separate services. Finally, it can be seen that the loss rates for high school graduates were remarkably similar across the services (ranging only from 24.2% to 26.2%).

TABLE 12 ATTRITION PRIOR TO COMPLETION OF THE FIRST THREE YEARS OF ACTIVE DUTY FOR FY73-FY76 NON-PRIOR SERVICE MALE ACCESSIONS

- BY SERVICE, EDUCATION LEVEL, AND CAUSE FOR ATTRITION -

DoD

<u>CAUSE FOR ATTRITION</u>	<u>GED</u>	<u>NHS GRADUATE</u>	<u>HS GRADUATE</u>
Medical	4.9	4.7	3.8
Dependency/Hardship	1.5	.8	1.1
Behavior/Performance	39.7	41.2	17.4
Other	2.8	2.8	2.8
Total	48.9	49.5	25.1

ARMY

<u>CAUSE FOR ATTRITION</u>	<u>GED</u>	<u>NHS GRADUATE</u>	<u>HS GRADUATE</u>
Medical	5.4	5.5	4.2
Dependency/Hardship	1.5	1.0	1.4
Behavior/Performance	39.4	41.2	17.2
Other	1.3	1.3	1.4
Total	47.6	49.0	24.2

NAVY

<u>CAUSE FOR ATTRITION</u>	<u>GED</u>	<u>NHS GRADUATE</u>	<u>HS GRADUATE</u>
Medical	3.1	2.9	3.5
Dependency/Hardship	.2	.4	.4
Behavior/Performance	38.8	46.4	18.7
Other	5.4	5.2	3.6
Total	47.5	54.9	26.2

MARINE CORPS

<u>CAUSE FOR ATTRITION</u>	<u>GED</u>	<u>NHS GRADUATE</u>	<u>HS GRADUATE</u>
Medical	5.2	4.5	5.3
Dependency/Hardship	.5	.4	.5
Behavior/Performance	35.2	36.0	15.5
Other	5.7	4.7	3.8
Total	46.6	45.6	25.1

AIR FORCE

<u>CAUSE FOR ATTRITION</u>	<u>GED</u>	<u>NHS GRADUATE</u>	<u>HS GRADUATE</u>
Medical	4.1	3.6	3.0
Dependency/Hardship	2.0	2.1	1.9
Behavior/Performance	42.1	41.7	17.2
Other	4.5	3.6	3.3
Total	52.7	51.0	25.4

Tables 13 and 14 build from Table 12, and display the relationships of educational level, mental group and race with attrition.

Table 13 displays attrition rates by AFQT group, educational level and by branch of service. Scores from the word knowledge and numerical operations subtests on the ASVAB are combined to form an individual's AFQT score.

One of the major conclusions that can be drawn from the data in Table 13 is that controlling (cross tabulating) by mental group does not eliminate the lower attrition rates of high school graduates (versus GEDs or non-high school graduates) shown in Table 12. Within the same mental group and service, the attrition rates of the high school graduate group was always lower than that of either the non-high school graduate or the GED groups.

As was shown in Table 12, the attrition rates of the GED groups were similar to those of the non-high school graduate groups. The difference between the attrition rates of the GED and non-high school graduate groups in the Navy should be noted. The lower (than the non-high school graduate) attrition rates of the GEDs hold up within mental groups for the Navy data.

Lastly, it can be seen for the high school graduates that attrition rates always increase as AFQT scores decrease. This pattern does not always hold for the GED and non-high school graduate groups.

Table 14 is the last of three tables (Tables 12-14) dealing with attrition from the military. Table 14 displays attrition by black/non-black, educational level, and by service. In most comparisons within educational level and within service, the attrition rates of the non-blacks are lower than that of blacks, but the differences between the attrition rates are often small.

TABLE 10. PERCENT ATTRITION PRIOR TO COMPLETION OF THE FIRST THREE YEARS OF ACTIVE DUTY FOR FY73-FY76 NON-PRIOR SERVICE, MALE ACCESSIONS

- BY SERVICE, EDUCATIONAL LEVEL, AND AFQT GROUPS -

<u>DoD</u>			
<u>AFQT GROUP</u>	<u>GED</u>	<u>NHS GRADUATE</u>	<u>HS GRADUATE</u>
1 & 2	44.4	45.4	21.2
3A	49.1	49.1	25.8
3B	52.3	51.9	29.1
4	49.5	49.6	30.3
Total	48.9	49.5	25.1

<u>ARMY</u>			
<u>AFQT GROUP</u>	<u>GED</u>	<u>NHS GRADUATE</u>	<u>HS GRADUATE</u>
1 & 2	44.8	44.8	20.2
3A	46.8	48.6	24.5
3B	50.2	50.4	27.0
4	49.4	49.5	28.4
Total	47.6	49.0	24.2

<u>NAVY</u>			
<u>AFQT GROUP</u>	<u>GED</u>	<u>NHS GRADUATE</u>	<u>HS GRADUATE</u>
1 & 2	41.9	46.3	22.0
3A	48.7	53.2	26.7
3B	53.3	58.7	31.6
4	--	57.9	36.0
Total	47.5	54.9	26.2

<u>MARINE CORPS</u>			
<u>AFQT GROUP</u>	<u>GED</u>	<u>NHS GRADUATE</u>	<u>HS GRADUATE</u>
1 & 2	43.6	42.7	21.0
3A	46.4	46.6	25.6
3B	51.7	47.6	29.3
4	43.8	41.5	28.6
Total	46.6	45.6	25.1

<u>AIR FORCE</u>			
<u>AFQT GROUP</u>	<u>GED</u>	<u>NHS GRADUATE</u>	<u>HS GRADUATE</u>
1 & 2	44.9	50.2	21.8
3A	53.0	50.1	26.5
3B	56.0	54.5	30.1
4	--	--	31.1
Total	52.7	51.0	25.4

TABLE 14. PERCENT ATTRITION PRIOR TO COMPLETION OF THE
FIRST THREE YEARS OF ACTIVE DUTY FOR FY73-FY76
NON-PRIOR SERVICE MALE ACCESSIONS

- BY SERVICE, RACE, AND EDUCATIONAL LEVEL -

DoD

<u>RACIAL GROUP</u>	<u>GED</u>	<u>NHS GRADUATE</u>	<u>HS GRADUATE</u>
Black	49.8	49.0	28.1
Non-Black	48.7	49.7	24.5

ARMY

<u>RACIAL GROUP</u>	<u>GED</u>	<u>NHS GRADUATE</u>	<u>HS GRADUATE</u>
Black	46.8	46.5	24.9
Non-Black	47.8	49.7	23.9

NAVY

<u>RACIAL GROUP</u>	<u>GED</u>	<u>NHS GRADUATE</u>	<u>HS GRADUATE</u>
Black	51.0	60.4	33.0
Non-Black	47.2	54.2	25.5

MARINE CORPS

<u>RACIAL GROUP</u>	<u>GED</u>	<u>NHS GRADUATE</u>	<u>HS GRADUATE</u>
Black	52.2	49.9	33.3
Non-Black	45.5	44.4	23.0

AIR FORCE

<u>RACIAL GROUP</u>	<u>GED</u>	<u>NHS GRADUATE</u>	<u>HS GRADUATE</u>
Black	58.2	57.0	29.6
Non-Black	52.0	45.5	24.7

The data in Table 14 support a point made in the discussions of Tables 12 and 13: the attrition rates of high school graduates are roughly one-half that of GEDs or non-high school graduates. Table 14 shows that this tends also to be true within racial groups within the same branch of the service.

Table 15 provides data concerning the retention beyond the first four years of active duty of NPS males, by service, level of education, and for FY73-FY75. Each number in Table 15 represents the percentage of an entering cohort remaining in the service beyond the first four years of their enlistment. For example, 19.2% of the total number of NPS male GEDs enlisting in FY73 were still on active duty beyond four years later. (No data are provided for GEDs in the Navy because the Navy did not differentiate GEDs from other non-high school graduates on the Defense Manpower Data Center's cohort file until FY 1976.)

Retention percentages such as those shown in Table 15 are influenced by several factors: a) the percentage of a group (e.g., FY73 GED enlistees in the Air Force) attriting prior to the completion of four years of service; b) the desire of an individual to stay in or to leave the service at the end of a 3-or 4-year enlistment; c) the desire of the service to reenlist the individual at the end of his enlistment, i.e., some individuals are deemed ineligible for reenlistment; d) the length of time for which the individual originally enlisted, i.e., some individuals enlist for more than four years, and, therefore, would be expected to be in the service beyond the first four years of active duty.

The data in Table 15 show that the four-year retention rates of high school diploma graduates were higher than those of the GED holders. The

TABLE 15. TRENDS IN RETENTION BEYOND THE FIRST FOUR YEARS
OF ACTIVE DUTY - BY FISCAL YEAR OF ENTRY, SERVICE,
AND EDUCATIONAL LEVEL - a

<u>FISCAL YEAR OF ENTRY</u>	<u>DoD</u>		
	<u>GED</u>	<u>NHS GRADUATE</u>	<u>HS GRADUATE</u>
FY 73	19.2	15.9	21.2
FY 74	19.8	15.0	25.5
FY 75	17.1	14.0	24.2

<u>FISCAL YEAR OF ENTRY</u>	<u>ARMY</u>		
	<u>GED</u>	<u>NHS GRADUATE</u>	<u>HS GRADUATE</u>
FY 73	20.0	19.1	20.0
FY 74	18.7	16.7	21.8
FY 75	17.0	15.3	21.5

<u>FISCAL YEAR OF ENTRY</u>	<u>NAVY</u>		
	<u>GED</u>	<u>NHS GRADUATE</u>	<u>HS GRADUATE</u>
FY 73	b	9.3	17.8
FY 74	b	9.9	23.4
FY 75	b	11.5	26.3

<u>FISCAL YEAR OF ENTRY</u>	<u>MARINE CORPS</u>		
	<u>GED</u>	<u>NHS GRADUATE</u>	<u>HS GRADUATE</u>
FY 73	14.8	13.0	16.0
FY 74	13.4	13.3	17.8
FY 75	9.5	12.2	15.8

<u>FISCAL YEAR OF ENTRY</u>	<u>AIR FORCE</u>		
	<u>GED</u>	<u>NHS GRADUATE</u>	<u>HS GRADUATE</u>
FY 73	19.0	19.7	27.3
FY 74	23.3	24.5	35.6
FY 75	20.5	20.6	29.9

- a. The table entries are percentages. The percentages can be read as giving the percentage of a group enlisting in the military who are still on active duty beyond the first four years of active duty.
- b. The Navy did not differentiate between GED holders and non-high school graduates on the Defense Manpower Data Center's cohort files until fiscal year 1976.

four-year retention rates of the GED holders were above those of the non-high school graduates, except in the Air Force, where the retention rates of non-high school graduates and GEDs were approximately equal.

The differences between the four-year retention rates of the high school graduates and the non-high school graduates were considerably larger for the Navy and Air Force than for the Army and Marine Corps. These differences among the retention rates may indicate that the high technology used by the Navy and Air Force requires more highly skilled and better educated operator and maintenance personnel than required by the Army and Marine Corps.

While Table 15 displayed the percentages describing the fraction of an entering cohort's serving beyond the first four years of enlisted active duty, Table 16 presents information about the conditional probability of remaining in the military. More specifically, Table 16 provides data revealing the percentage of a group remaining beyond four years of service, given the group had completed four years of service. For example, the data in Table 16 shows that 27% of the non-black, non-high school graduates who enlisted in the Army in 1975, and who finished 48 months of active duty, remained in the Army beyond 48 months of service.

The data in Table 16 show for DoD overall that, given 48 months of service, GEDs are more likely to stay beyond 48 months than are non-high school graduates or high school graduates. This finding also holds true for the Army. Regardless of educational level or branch of service, blacks are more likely than non-blacks to stay in the military beyond four years, given they have completed four years of service, except for the high school graduates in the Navy, where the non-blacks are slightly more likely to stay than are the blacks.

TABLE 16. RETENTION BEYOND 48 MONTHS OF ACTIVE DUTY OF PERSONNEL ON
ACTIVE DUTY AT THE END OF 48 MONTHS OF SERVICE
- BY SERVICE FOR PERSONNEL ENLISTING IN FISCAL YEAR 1975 ^a

	ARMY		NAVY		MARINE CORPS		AIR FORCE		DoD	
	Non- Black	Black	Non- Black	Black	Non- Black	Black	Non- Black	Black	Non- Black	Black
NON-HIGH SCHOOL GRADUATE	27.	36.	22.	37.	24.	34.	38.	63.	26.	35.
GED	31.	42.	b	b	17.	24	38.	53.	31.	41.
HIGH SCHOOL GRADUATE	23.	38.	29.	26.	18.	25.	33.	52.	27.	38.

a. Data entries are percentages.

b. The Navy did not differentiate GEDs from non-high school graduates on the
Defense Manpower Data Center's cohort files until fiscal year 1976.

The multiple regression results (Smith and Kendall, 1980) shown in Table 17 are from an analysis of attrition from the Navy. In 1976, the Navy conducted an experiment designed to determine whether or not attrition of first-term enlistees could be "front-loaded", i.e., attrition would be managed so it would occur shortly after enlistment and prior to the individual joining an operational unit. Therefore, an experimental group of enlistees was established, the members of which could leave the Navy, with sufficient notice time, with no prejudice prior to the end of their enlistment. Because the experimental and control groups were carefully tracked, the data from those groups presented an opportunity to examine the relationship of attrition with a number of predictor variables.

The regression results in Table 17 come from the regression summary table, and the regression coefficients are the predictor weights when all statistically significant predictors ($p < .05$) were in the equation. Non-significant predictors are shown in Table 17 simply to provide information to the reader.

The regression coefficients can be interpreted as percentages in comparisons between a predictor and a base case (the group subsumed in the intercept of the regression equation). For instance, for attrition after 12 months of service, equation (1) in Table 17 shows that the experimental group had an attrition rate 23.2 percentage points greater than that of the control group. Of more interest, however, are the relationships of educational credentials to attrition and to months of service completed.

High school diploma graduates are represented in the intercepts of the equation given in Table 17. Therefore, for example, the 12-month rate for non-high school graduates was, on average, 15.9 percentage points higher than that of high school graduates (see equation (1) in Table 17).

TABLE 17. ATTRITION FROM THE NAVY: REGRESSION RESULTS FOR
TRADITIONAL ATTRITION VARIABLES WITH EDUCATIONAL
CREDENTIALS INCLUDED AS PREDICTORS

	ATTRITION		COMPLETED MONTHS OF SERVICE	
	(1) 12 months of service	(2) 34 months of service	(3) 34 months after experiment began	(4) 40 months after experiment began
Constant	.456	.269	26.18	30.31
	<u>B</u>	<u>B</u>	<u>B</u>	<u>B</u>
Condition	.232	.370*	-9.08*	-11.30*
Non-HSG	.159	.253*	-6.78*	-8.26*
GED	.088	.198*	-4.30*	-5.48*
HS Plus	-	-	-	-
Years ED	-.017*	-	-	-
Sex	-	-	-	-
White	.064*	.071*	-2.19*	-2.68*
Single	-.124*	-.073**	3.35*	3.80*
AFQT	-.001*	-	.03*	.04*
Age	-	-	-	-
R ²	.109	.196	.172	.185
F statistic	79.80 *	224.02 *	158.47 *	173.27 *
N	4598	4598	4598	4598

* Significant at .01 level

- Not significant (not entered into the equation)

Dependent variable = 1 if attrited
0 if had not attrited

Condition = 1 for experimental group
0 for control group

GED = 1 for GED holder
0 for non-GED

Non-HSG = 1 for no high school diploma, no GED
0 otherwise

Years Education = years of education completed

Sex = 1 for male
0 for female

White

= 1 if white
0 otherwise

Single

= 1 if enlistee had no dependents
0 otherwise

AFQT

= AFQT score

Age

= Age (in years) at enlistment

The attrition rate for the GED group was only 8.8% higher than that of high school graduates after 12 months of service, but 19.3% higher than the rate for high school graduates after 34 months of service (34 months after the month in which the cohort began its enlistment). The attrition rates for non-high school graduates were higher than those of either the GEDs or the high school graduates at the 12-month and 34-month service points.

Equations (3) and (4) in Table 17 reveal that the average GED and the average non-high school graduate completed less time in the Navy than did the high school graduates. The GED group, however, completed approximately 2.5 months more of service per person, on average, than did the non-high school graduate personnel.

The data in Table 17 indicate that, on average, in terms of attrition and length of service completed, high school graduates are better risks than GEDs, who, in turn, are better risks than non-high school graduates. It should be pointed out, however, that the R^2 s for the equations in Table 16 are of rather modest magnitude. The next table, Table 18, reveals that considerably larger R^2 s were obtained when some job assignment variables were used as predictors.

Table 18 presents the results obtained when the predictor variables shown in Table 17 are supplemented with selected job assignment information.

Perhaps the first thing to note about the results in Table 18 is how much larger the R^2 s are than those shown in Table 17. The addition of job assignment information increases the proportion of criterion variance explained by as much as five times.

The second conclusion that can be reached by comparing the results in Table 18 with those in Table 17 is that, when assignment variables are

Variables Shown in Table 18

Dependent variable	= 1 if attrited, 0 otherwise
Condition	= 1 for experimental group, 0 otherwise
GED	= 1 for GED holder, 0 otherwise
Non-HSG	= 1 for no high school diploma and no GED, 0 otherwise
Years Ed	= 1 for each year of education completed
Sex	= 1 for male, 0 for female
White	= 1 if white, 0 otherwise
Single	= 1 if enlistee had no dependents, 0 otherwise
AFQT	= AFQT score
Age	= Age (in years) at enlistment
Air Squadron	= 1 if assigned to an air squadron, 0 otherwise
Ship	= 1 if assigned to a combat ship, but not an aircraft carrier, 0 otherwise
HS Plus	= 1 if enlistee had attended college, 0 otherwise
Sea	= 1 if assigned to support ship, 0 otherwise
CV	= 1 if assigned to an aircraft carrier, 0 otherwise
Sub	= 1 if assigned to a submarine, 0 otherwise
Shore	= 1 if assigned to shore duty, 0 otherwise (this variable is needed because some people assigned to sea duty would not be assigned a "1" under any of the following variables: ship, sea, CV, sub, or shore
General Detail	= 1 if assigned to general detail (unskilled jobs); 0 if assigned to jobs requiring technical training

TABLE 18. ATTRITION FROM THE NAVY: ATTRITION REGRESSION
RESULTS WITH SITUATIONAL AND MODIFIED EDUCATIONAL
CREDENTIALS INCLUDED AS PREDICTORS

	ATTRITION		COMPLETED MONTHS OF SERVICE	
	(1) 12 months	(2) 34 months	(3) 34 months	(4) 40 months
Constant	.499	.337	25.35	29.82
	<u>B</u>	<u>B</u>	<u>B</u>	<u>B</u>
Condition	.116	.294	-5.71	-7.47
Non-HSG	-	.135	-2.19	-3.00
GED	-	.135	-1.95	-2.75
HS Plus	-	-	-	-
Years ED	-.012	-	-	-
Sex	.129	-	-3.46	-3.75
White	.053	.077	-1.63	-2.05
Single	-.043	-	-	-
AFQT	-	-	-.02	-.02
Age	-	-	-	-
Air Squadron	-.579	-.354	16.75	18.87
Ship	-.578	-.264	16.01	17.59
Sea	-.291	-.341	16.96	18.99
CV	-.597	-.270	16.29	17.90
SUB	-.577	-.294	17.01	18.79
Shore	-.355	-.144	9.91	10.75
General Detail	.347	.277	-10.27	-11.95
R ²	.566	.351	.593	.565
F statistic	500.38	227.12	514.13	459.45
N	4598	4598	4598	4598

- Not significant (not entered into the equation)
All other statistics are significant at $\leq .05$ level.

considered, GED versus non-high school graduate differences tend to disappear. This can be seen by examining the regression coefficients for GEDs and non-high school graduates for each of the equations (1) - (4) in Table 18. In equation (2), for instance, the regression coefficients for both the non-high school graduate and the GED groups are .135. This value means that the non-high school graduate and GED groups had 13.5% more attrition in the first 34 months of enlistment than did the high school graduates, even after differences on the other predictor values had been controlled statistically.

Attrition data for the Army were also available from DMDC data files. These data were used in a multiple regression analysis to examine the relationship of educational accomplishment to attrition from the Army.

Data from 489,563 non-prior service males enlisting in the Army during 1974-1976 were used in the analysis. Each of the individuals was placed into a group using educational accomplishments (3 levels), mental group (4 levels), age (3 levels), and race (2 levels). The percentage of individuals lost during the first three years of enlistment in the Army was then calculated for each of the $3 \times 4 \times 3 \times 2 = 72$ groups. The loss percentages formed the dependent variable for the regression analysis. The regression constant and the regression coefficients can therefore be read as percentages. Table 19 provides the results of the regression analysis.

The regression coefficients in Table 19 show that, other things being equal, non-high school graduates have a loss rate 24.6% higher than that of high school graduates. The three-year loss rate for GED holders is somewhat lower than that of non-high school graduates (regression coefficients of 22.48 and 24.6 respectively). The results in Table 19 again show that upper mental group, high school graduates of 18-19 years of age are the

most likely to cope successfully with life in the military. Younger non-high school graduates who do poorly on the ASVAB have the highest loss rates.

TABLE 19. ATTRITION FROM THE ARMY: PREDICTION OF LOSSES FROM THE ARMY DURING THE FIRST THREE YEARS OF ENLISTMENT (DATA ARE FROM 1974-1976 NON-PRIOR SERVICE ACCESSIONS; THE DEPENDENT VARIABLE CONSISTED OF THE LOSS PERCENTAGES FOR THE GROUPINGS FORMED BY THE INDEPENDENT VARIABLES)

<u>Constant</u>	26.44
Non-high school grad.	24.60
GED	22.48
Mental Groups I & II	-4.30
17 years old	3.43
Mental Group IIIA	-2.15
Black	-1.95
≥20 years old	0.97
Mental Group IV	0.73
 R ²	 .908
F Statistic	165.90
N	489,653

(The intercept, or constant, subsumes the following group: 18 and 19 year old, mental group IIIB, non-black, high school graduates.)

All statistics are significant at $\leq .05$.

Chapter Summary

The data presented in this chapter came from non-prior service (NPS) males enlisting in the U.S. military during most of the decade of 1970-1980. Some of the major results were the following:

- o The percentage of NPS male accessions who were GED holders ran from about 5.3% to 6.3% per year.
- o Lower percentages of GEDs and high school graduates scored in mental group IV than was the case for non-high school graduates.
- o Subtest scores on the ASVAB of high school graduates and GEDs were higher than the scores of non-high school graduates. The average scores of GED holders on vocationally oriented ASVAB subtests slightly exceeded the scores of high school graduates (and the scores of non-high school graduates).
- o The modal GED enlistee was 18 years old.
- o The percentage of GED enlistees who were black ranged from 12 to 16% per year.
- o The Southern states have produced from about 36 to 43% of the GED enlistees per year.
- o The modal assignment of high school graduates and GED holders was to electrical/mechanical military occupations, while non-high

school graduates were most often assigned to combat-oriented occupations.

- o The average paygrade attainment during the first enlistment of high school graduates exceeded that of GED holders, which, in turn, exceeded that of non-high school graduates.
- o About 50% of a typical entering group of GED holders attrited during their first three years of service. The attrition rate for non-high school graduates was usually about 1% higher than that of the GEDs. The attrition rates for GEDs and non-high school graduates were about twice that of high school graduates.
- o Of an entering cohort, a greater percentage of high school graduates than GEDs remained on service beyond four years of active duty. In turn, the percentage of GEDs remaining beyond four years exceeded that percentage for non-high school graduates.
- o Of a cohort that had finished four years of service, a greater percentage of GED holders remained on active duty beyond four years than was the case for either high school graduates or non-high school graduates.
- o Statistical analyses of Army and Navy attrition data showed that the attrition rates for GED holders and non-high school graduates exceeded the attrition rate for high school graduates even when mental test score, age, and race were statistically controlled.

Results obtained with the Navy data hint that job and assignment variables are related to attrition and may moderate to some extent the relationship between educational level and attrition.

CHAPTER III
THE RELATIONSHIP OF JOB CORPS EXPERIENCE
TO ENLISTMENT IN THE MILITARY

This chapter presents the results of analyses of data addressing the relationship of Job Corps experiences to entrance into the military. The Job Corps data file was available at the Defense Manpower Data Center (DMDC), Monterey, California. A total of 391,552 records were on the file, which included terminations from the Job Corps during the period 1970-1978. A number of data screening and editing computer runs were conducted before records from the Job Corps file were used in statistical analyses.

The screening of the data file eliminated 6,962 records because of missing information; 29,922 duplicate records were deleted; the records of 92,721 females were dropped; and the records of 5,759 males who had had military experience before joining the Job Corps were deleted. The aforementioned deletions left 256,188 useful records on the Job Corps file.

The next step was to match the Job Corps data file with the services' accession data files in order to identify Job Corps personnel who later entered the military. This analysis yielded the records of 47,522 non-prior service males who had been in the Job Corps sometime during 1970-1978 and who had entered the military during fiscal years 1971 through 1979. In percentage terms, about 18.5% of the 256,188 non-prior service males with records on the 1970-1978 Job Corps data file entered the military after having been in the Job Corps. The 47,522 Job Corps males entering the military during 1971-1979 after having been in the Job Corps should be viewed in the context of the total of approximately 3.8 million non-prior

service personnel who entered the military services during that time period. Former Job Corps trainees therefore comprised less than 1.3% of the non-prior service accessions to the military during 1971-1979.

Because educational attainment and the relationships of educational attainment with other measures are of central importance to this research, it was of interest to compare the educational attainment information on the Job Corps file with that on the services' data files. A cross-tabulation of the educational information on the two data files was developed. Table 20 shows the results of this cross-tabulation; some of the more noteworthy observations that can be made about the results include the following:

- o The services' files yielded about 3500 fewer non-high school graduates than did the Job Corps' files.
- o The services' files yielded about four times as many (8365 vs. 2107) high school graduates as did the Job Corps' files.
- o The services' files yielded about 500 more GED holders than did the Job Corps' files.
- o The Job Corps' file had about 3300 more individuals with unknown educational attainment than did the services' files; most (71.4%) of the "unknowns" in the Job Corps' files were labeled non-high school graduates in the services' files.
- o The modal educational attainment, according to both data files, was non-high school graduate.

TABLE 20. EDUCATIONAL LEVEL RECORDED ON THE JOB CORPS FILE
BY EDUCATIONAL LEVEL RECORDED ON THE SERVICES'
DATA FILES

EDUCATIONAL LEVEL ON THE JOB CORPS' FILE ^b	EDUCATIONAL LEVEL RECORDED ON THE SERVICES' DATA FILES ^a					
	NHS	GED	HSG	UNKNOWN	TOTAL	PERCENT
NHS	22961	3219	4022	229	30431	70.3
GED	1258	3843	1905	95	7101	16.4
HSG	128	98	1867	14	2107	4.9
UNKNOWN	<u>2610</u>	<u>455</u>	<u>571</u>	<u>20</u>	<u>3656</u>	<u>8.4</u>
TOTAL	25957	7615	8365	358	43295 ^c	
PERCENT	62.3	17.6	19.3	.8		100.0

- a. Educational level recorded at time of enlistment into the military.
- b. Educational level at termination from the Job Corps.
- c. Although 47,522 non-prior service males entered the service after leaving the Job Corps, only 43,295 personnel are represented in this table. This reduction in sample size occurred because the Navy did not separately code GEDs on the Defense Manpower Data Center's cohort files until 1976. Therefore, data from individuals entering the Navy prior to 1976 are excluded from this table.

- b) GED holders comprised 16.4% of the records according to the Job Corps' file and 17.6% according to the services' data files. This agreement between the two percentages hides the considerable shuffling that can be seen if Table 20 is examined. For instance, 98 individuals coded as high school graduates according to the Job Corps' file were recorded as GED holders on the services' files.

Complete consistency between the educational information reported on the two files should not be expected -- even if record keeping were perfect, which it probably was not. In the time period between leaving the Job Corps and enlisting in the military, many individuals could be expected to earn a GED or a high school diploma, which would help to account for a pattern of increase in educational attainment visible in Table 20. Decreases in reported educational attainment after leaving the Job Corps are probably most parsimoniously explained as being due to data recording errors, and to inconsistencies concerning what constitutes adequate documentation of GED holder or high school graduate status.

The educational accomplishments of non-prior service males who joined the service sometime after leaving the Job Corps can be compared with those of all non-prior service (NPS) males leaving the Job Corps by comparing the data in Table 20 with those in Table 21. The comparisons indicate that while 77.3% of the males leaving the Job Corps were non-high school graduates, 70% of all those NPS Job Corps males joining the military were non-high school graduates. Additionally, while 9.3% of the non-prior service males leaving the Job Corps were GED holders, 16.4% of all NPS Job Corps

TABLE 21. EDUCATIONAL ATTAINMENT OF NON-PRIOR SERVICE
MALES LEAVING THE JOB CORPS DURING THE PERIOD
1970-1978 (INCLUDES BOTH ENTRANTS AND NON-
ENTRANTS TO THE MILITARY.)

<u>EDUCATIONAL LEVEL</u> ^a	<u>NUMBER</u>	<u>PERCENT</u>
NHS	198,105	77.3
GED	23,711	9.3
HSDG	12,610	4.9
UNK	<u>21,762</u>	<u>8.5</u>
TOTAL	256,188	100.0

- a. Educational status at termination of Job Corps enrollment; data were taken from the Job Corps' data files.

and joining the military had GEDs. The percentage of high school graduates among those entering the service was the same as the percentage of high school graduates among those leaving the Job Corps. It would appear from these data that the services are to a limited extent screening out non-high school graduates and selecting GED holders from those males who left the Job Corps.

The data in Table 22 address, by educational category, the percentage of individuals leaving the Job Corps and joining the military. The years in Table 22 give the year of entry into the Job Corps and the educational levels as recorded on the Job Corps' file.

The data in Table 22 indicate that over the years covered (1969-1978), the percentage of non-high school graduates leaving the Job Corps and joining the military underwent an almost steady decline from a high of 23.8% in 1971 to 6.6% in 1978. The percentage of GEDs who joined the service after leaving the Job Corps also declined during the decade of the 1970s, as did the percentage of high school graduates. All of these declines should be viewed in the context of a general decline in the percentage of Job Corps leavers who joined the military. This general decline can be seen if the figures in the "Total" section of Table 22 are reviewed. The percentages for the most recent years, e.g., 1977 and 1978, are probably somewhat artificially depressed relative to earlier years. The service accession files used in the analysis covered the years 1971-1979 and individuals joining the Job Corps in 1978 may not have had time to leave the Job Corps and join the service by the end of fiscal year 1979 (30 September 1979).

The rightmost column in Table 22 is labeled "Ns", and provides numbers of individuals represented in the table. The Ns given in Table 22 are also

TABLE 22.
CHARACTERISTICS OF JOB CORPS TRAINEES ENTERING SERVICE BY
YEAR OF ENTRY INTO JOB CORPS AND EDUCATIONAL LEVEL

Non High School Graduate ^a												
	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	Total	%
Total Job Corps	3.7	11.7	12.2	11.9	11.3	12.9	10.9	9.9	9.8	5.7	100.0	198.105
Service Entrants	4.1	16.4	17.3	15.4	12.8	11.5	8.6	6.7	4.7	2.2	100.0	33.317
Non-Entrants	3.5	10.8	11.2	11.1	11.0	13.1	11.4	10.6	10.9	6.4	100.0	164.788
% Entered Service	20.3	23.5	23.8	21.9	19.0	15.1	13.3	11.3	8.1	6.6	16.8	
GED												
Total Job Corps	5.0	10.6	12.8	12.8	12.2	11.9	12.6	11.1	9.4	1.8	100.0	23.711
Service Entrants	5.9	13.5	14.6	14.7	13.0	12.1	11.1	7.9	5.9	1.1	100.0	7.887
Non-Entrants	4.5	9.1	11.8	11.8	11.9	11.8	13.4	12.7	11.1	1.9	100.0	15.824
% Entered Service	39.5	42.7	38.6	38.4	35.3	33.8	29.2	23.8	20.9	22.5	33.3	
High School Graduates												
Total Job Corps	2.0	7.6	10.8	9.6	9.4	11.7	13.6	16.5	13.4	5.4	100.0	12.610
Service Entrants	2.0	11.0	15.0	12.8	9.7	10.2	12.7	13.9	9.7	3.0	100.0	2.244
Non-Entrants	2.0	6.9	9.9	8.9	9.3	12.0	13.8	17.1	14.2	5.9	100.0	10.366
% Entered Service	17.9	25.7	24.7	23.7	18.5	15.5	16.6	15.0	13.0	10.0	17.8	
TOTAL												
Total Job Corps	3.9	11.6	12.6	12.2	11.0	12.1	11.4	10.3	9.8	5.1	100.0	234.426
Service Entrants	4.9	15.8	16.9	15.4	12.3	11.0	9.4	7.2	5.1	2.0	100.0	43.448
Non-Entrants	3.6	10.6	11.6	11.5	10.8	12.4	11.8	11.0	10.9	5.8	100.0	190.978
% Entered Service	23.4	25.4	24.9	23.3	20.6	16.8	15.4	12.9	9.7	7.3	18.6	

Note. Data from 21,762 individuals were excluded due to unknown educational attainment

approximately the Ns for Tables 23-36 - "approximately" because missing data, such as state-of-origin, might have caused minor variation in the numbers of observations among the tables.

Table 23 provides data comparing the percentage of high school graduates among Job Corps entrants to the military and the percentage of high school graduates among all non-prior service male entrants into the military. No formal statistical test is needed to confirm that the differences between or among the percentages from the two sources are significant.

Table 24 provides data concerning reasons for leaving the Job Corps and the probability of entering the military. The educational information used in developing Table 24 was taken from Job Corps rather than service data files.

One of the more noteworthy results in Table 24 is that 78.1% of the individuals coded as GEDs on the Job Corps file were also coded as having completed the Job Corps. This percentage is nearly twice that for high school graduates (38.4%), and about four times that for non-high school graduates (19.4%). While only 7.1% of the GED holders who left the Job Corps left for AWOL or disciplinary reasons, 35.1% of the non-high school graduates and 20.9% of the high school graduates who left the Job Corps left for those reasons. Greater percentages of non-high school (36.6%) and high school graduates (33.2%) resigned than was true for GED holders (12.9%).

The percentage of individuals entering the service by educational level reason x reason-for-resignation combination varied from a high of 44.9% for GED holders who left the Job Corps because of withdrawal of parental consent, to a low of 8.8% for two combinations: medical x non-high school graduate and medical x high school graduate. The services may

TABLE 23. PERCENTAGES OF HIGH SCHOOL GRADUATES AMONG THE
JOB CORPS POPULATION JOINING THE MILITARY
AND AMONG THE TOTAL NON-PRIOR SERVICE (NPS)
MALE ACCESSION POPULATION

	YEAR OF ENTRY TO SERVICE						
	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>
JOB CORPS ACCESSIONS TO MILITARY ^a	3.7	3.3	3.6	3.3	5.4	5.3	7.2
ALL NPS MALE ACCESSIONS	69.	68.	67.	58.	64.	67.	68.

a. Job Corps educational data were used.

TABLE 24.
CHARACTERISTICS OF JOB CORPS TRAINEES ENTERING SERVICE
-REASON FOR LEAVING JOB CORPS-

Completion	Maximum Benefits	Resigned	Withdrawal of Parental Consent	Non-High School Graduates			Disciplinary Discharge	Total
				Administrative Discharge	Medical	AWOL		
Total Job Corps	19.4							
Service Entrants	.6	36.6	3.4	3.7	.8	23.4	11.8	100.0
Non-Entrants	1.0	34.9	3.0	4.2	.1	21.5	10.2	100.0
% Entered Service	9.9	37.0	3.5	3.6	.9	23.1	12.1	100.0
		16.0	15.1	19.3	8.8	17.6	14.6	16.8
GED								
Total Job Corps	78.1							
Service Entrants	.5	12.9	.4	.5	.2	4.0	3.1	100.0
Non-Entrants	.9	14.0	.6	.5	.1	4.7	3.4	100.0
% Entered Service	24.2	12.4	.3	.6	.2	3.6	3.0	100.0
		36.1	44.9	30.2	20.5	39.4	25.6	33.3
High School Graduates								
Total Job Corps	38.4							
Service Entrants	.5	33.2	2.7	2.8	1.1	16.2	4.7	100.0
Non-Entrants	1.0	33.6	2.0	2.6	.5	15.0	4.6	100.0
% Entered Service	9.0	33.1	2.9	2.8	1.2	16.5	4.7	100.0
		18.0	13.2	16.3	8.8	16.4	17.7	17.8
TOTAL								
Total Job Corps	25.5							
Service Entrants	.5	34.4	3.0	3.3	.8	21.3	10.8	100.0
Non-Entrants	1.0	31.6	2.5	3.4	.4	20.8	8.9	100.0
% Entered Service	10.9	35.0	3.1	3.3	.9	21.4	11.2	100.0
		17.1	15.3	19.1	9.8	18.2	15.3	18.6

a. Includes Resignation in lieu of disciplinary action.

find it surprising that they are enlisting substantial percentages (even though the numbers of individuals are small in light of approximately 400,000 military enlistments per year) of personnel who left the Job Corps for adverse reasons, e.g., AWOL and disciplinary discharge. These discharge reasons accounted for 20.8% and 8.9%, respectively, of the total number of former Job Corps trainees who entered the military.

Table 25 presents data concerning the ages and educational levels of Job Corps trainees who entered the service. The ages given in the table are as of entry into the Job Corps, and the educational levels were taken from the Job Corps' data files.

The data in Table 25 present no surprises: non-high school graduates tended to be younger than GED holders, who tended to be younger than high school graduates. Overall, a higher percentage (23.5%) of the individuals who were 16 years old when they joined the Job Corps eventually entered the military than was the case for any other age group. Sixteen was also the age at Job Corps entry which non-high school graduates and GEDs were most likely to join the service. The comparable age for high school graduates was 17 years old, a Job Corps entry age group in which 25.3% of the high school graduates entered the military.

Table 26 compares the ages of Job Corps service entrants to the ages of the population of non-prior service male entrants into the services during the years 1971-1979. The ages used are age at entry into the military, and were taken from the services' data files.

A Kolmogorov-Smirnoff statistical test was used to compare the two cumulative percentage distributions. The distributions are different at $p < .01$. By inspection of Table 26, it can be seen that Job Corps entrants to the military tended to be younger than did enlistees in general.

TABLE 25. CHARACTERISTICS OF JOB CORPS TRAINEES ENTERING
SERVICE - AGE IN YEARS AT JOB CORPS ENTRY -

<u>NON-HIGH SCHOOL GRADUATES</u>								
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21+</u>	<u>TOTAL</u>	<u>MEAN</u>
<u>TOTAL JOB CORPS</u>	34.8	29.0	16.8	10.2	5.9	3.3	100.0	17.3
SERVICE ENTRANTS	43.8	30.8	14.4	6.8	3.0	1.2	100.0	17.0
NON-ENTRANTS	33.0	28.7	17.2	10.9	6.5	3.7	100.0	17.4
% ENTERED	21.3	18.0	14.5	11.3	8.5	6.1	16.9	
<u>GED</u>								
<u>TOTAL JOB CORPS</u>	31.2	31.1	17.1	10.8	6.2	3.6	100.0	17.4
SERVICE ENTRANTS	41.3	33.2	14.6	7.1	2.6	1.2	100.0	17.0
NON-ENTRANTS	26.2	30.1	18.4	12.6	7.9	4.8	100.0	17.6
% ENTERED	44.0	35.5	28.3	21.9	14.2	11.5	33.3	
<u>HIGH SCHOOL GRADUATES</u>								
<u>TOTAL JOB CORPS</u>	.4	4.7	23.5	31.5	24.1	15.8	100.0	19.2
SERVICE ENTRANTS	.4	6.7	32.8	31.6	19.2	9.3	100.0	18.9
NON-ENTRANTS	.4	4.3	21.4	31.5	25.2	17.2	100.0	19.3
% ENTERED	20.0	25.3	24.9	17.8	14.1	10.5	17.8	
<u>TOTAL</u>								
<u>TOTAL JOB CORPS</u>	32.9	28.1	17.1	11.2	6.8	3.9	100.0	17.4
SERVICE ENTRANTS	41.5	30.1	15.2	8.0	3.6	1.6	100.0	17.1
NON-ENTRANTS	31.0	27.6	17.5	12.0	7.5	4.4	100.0	17.5
% ENTERED	23.5	20.0	16.6	13.2	10.0	7.6	18.6	

TABLE 26. AGES AT ENTRY INTO THE MILITARY DURING 1971-1979,
JOB CORPS AND TOTAL NON-PRIOR SERVICE (NPS) ACCESSIONS
- DATA ARE CUMULATIVE PERCENTAGES -

	Age at Entry									
	17	18	19	20	21	22	23	24	25	30
All NPS Male Accessions	17.6	48.5	71.5	84.1	90.1	94.4	97.0	98.4	99.2	100.
Job Corps Accessions	23.2	52.0	71.1	83.1	90.4	94.7	97.1	98.5	99.2	100.

Table 27 displays service entrant/non-entrant percentages by race and educational level. Overall, 58.1% of the individuals having data on the Job Corps file were black. Black was also the modal racial group for each of the three educational levels.

Black GED holders were more likely to enter the military than were white or other racial group members who were GEDs. Among non-high school and high school graduates, whites were more likely to enter the military than were members of any other racial group.

The data in Table 27 also reveal that, overall, 53.6% of the Job Corps trainees entering the service were black. Table 5 of this report provided data indicating that the (total DoD) percentages of black among non-prior service males averaged about 20% per year for the period 1973-1979.

Tables 28 and 29 present additional information concerning years of education of Job Corps entrants into the military. The educational information was taken from the Job Corps' data file.

An examination of the actual and expected frequencies in Table 28 will show that for whites the actual frequencies at 7-9 years of education exceed the expected frequencies, while the actual frequencies at 10-12 years of education are less than the expected frequencies. For blacks, the opposite pattern tends to hold: the numbers of blacks with 10-12 years of education exceeds expectations, while the numbers with 8-9 years of education is less than expected.

Table 29 recasts the educational level into cumulative distributions and combines blacks and "others" into a single group. The data in Table 29 clarify the trends in Table 28: white Job Corps trainees who later enter

TABLE 27. CHARACTERISTICS OF JOB CORPS TRAINEES ENTERING SERVICE - RACE -

<u>NON-HIGH SCHOOL GRADUATES</u>						
	<u>WHITE</u>	<u>BLACK</u>	<u>SPANISH</u>	<u>ASIAN</u>	<u>INDIAN</u>	<u>TOTAL</u>
<u>TOTAL JOB CORPS</u>	28.5	58.9	9.5	1.0	2.1	100.0
SERVICE ENTRANTS	37.9	51.7	7.9	1.1	1.4	100.0
NON-ENTRANTS	26.6	60.4	9.8	1.0	2.2	100.0
% ENTERED	23.0	15.2	14.3	18.3	11.8	17.3

<u>GED</u>						
	<u>WHITE</u>	<u>BLACK</u>	<u>SPANISH</u>	<u>ASIAN</u>	<u>INDIAN</u>	<u>TOTAL</u>
<u>TOTAL JOB CORPS</u>	39.8	45.0	11.8	.7	2.7	100.0
SERVICE ENTRANTS	35.9	52.3	9.6	.6	1.6	100.0
NON-ENTRANTS	41.8	41.3	13.0	.7	3.2	100.0
% ENTERED	30.7	39.4	27.6	29.8	20.2	34.0

<u>HIGH SCHOOL GRADUATES</u>						
	<u>WHITE</u>	<u>BLACK</u>	<u>SPANISH</u>	<u>ASIAN</u>	<u>INDIAN</u>	<u>TOTAL</u>
<u>TOTAL JOB CORPS</u>	37.3	50.0	8.2	1.7	2.8	100.0
SERVICE ENTRANTS	27.4	62.5	7.0	1.8	1.3	100.0
NON-ENTRANTS	39.4	47.3	8.5	1.7	3.1	100.0
% ENTERED	31.6	22.3	15.1	18.1	8.8	17.9

<u>TOTAL</u>						
	<u>WHITE</u>	<u>BLACK</u>	<u>SPANISH</u>	<u>ASIAN</u>	<u>INDIAN</u>	<u>TOTAL</u>
<u>TOTAL JOB CORPS</u>	29.2	58.1	9.7	1.0	2.0	100.0
SERVICE ENTRANTS	35.9	53.6	8.1	1.0	1.4	100.0
NON-ENTRANTS	27.6	59.1	10.1	1.0	2.2	100.0
% ENTERED	23.4	17.5	15.9	18.9	12.6	19.0

TABLE 28. HIGHEST YEAR OF EDUCATION AMONG JOB CORPS ENTRANTS
INTO THE MILITARY DURING 1971-1979
- BY RACIAL GROUP -^{a,b}

Racial Group	Highest Year of Education										TOTAL
	<4	5	6	7	8	9	10	11	12		
White	101 (114)	17 (27)	115 (141)	638 (635)	2866 (2434)	4724 (4368)	3425 (3605)	999 (1368)	584 (757)	13465	
Black	176 (165)	40 (39)	218 (203)	940 (918)	3115 (3517)	5967 (6342)	5432 (5211)	2324 (1978)	1256 (1095)	19466	
Other	34 (33)	16 (8)	51 (40)	157 (181)	664 (694)	1290 (1251)	988 (1028)	413 (390)	228 (216)	3841	
Total	311	73	384	1735	6645	11981	9845	3725	2068	36778	

a. Data in parentheses are expected frequencies under the null hypothesis.

b. Highest year of education by race data were available for only 36,778 individuals.

Chi-Square = 443.8, df = 16, $p < .01$.

TABLE 29. HIGHEST YEAR OF EDUCATION AMONG JOB CORPS ENTRANTS TO THE MILITARY DURING 1971-1979, BY WHITE AND MINORITY - DATA ARE CUMULATIVE PERCENTAGES (N = 36,778; DATA ARE FROM JOB CORPS FILES)

RACIAL GROUP	Highest Year of Education								
	<u>< 4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>
WHITE	0.7	0.9	1.7	6.5	27.7	62.8	88.2	95.7	100.0
MINORITY	0.9	1.1	2.3	7.0	23.2	54.3	82.0	93.6	100.0

NOTE: A number in the table gives the percentage of that group having that many or fewer years of education.

the military tend to have finished fewer years of education than is the case for the minority entrants. A Kolmogorov-Smirnoff test substantiated (p = .01) that the two distributions in Table 29 were different.

Table 30 presents the data concerning the placement status and educational levels of individuals leaving the Job Corps and entering the service. Placement status and educational accomplishment data were both taken from the Job Corps' data files. The reader might expect nearly 100% of the individuals whose post-Job Corps placement status was the armed forces to have joined immediately, in fact, the services. Inspection of Table 30 will reveal, however, that overall only 69.2% of those whose placement status was to the armed forces had records on the services' accession files by 30 September 1979. Probable reasons for these apparent losses include: failure to meet service physical, mental or moral standards, and the use of intentions rather than outcomes when coding placement status after leaving the Job Corps.

As can be seen in Table 30, most service entrants (57.9%) had an original status of "Job" when they left the Job Corps. This finding also holds for each of the educational accomplishment groups. Of the GED holders who left the Job Corps and joined the military, 61.2% had an initial post-Job Corps placement status of "Job". This exceeds the percentage for either the non-high school graduates (58.1%) or the high school graduates (54.5%) who joined the military after leaving the Job Corps for a job.

The groups of GED holders who left the Job Corps with a placement status of "School" had a service entrance rate of 32.2% -- much higher than the rates for non-high school graduates (18.0%) or high school graduates (13.9%).

TABLE 30. CHARACTERISTICS OF JOB CORPS TRAINEES ENTERING
SERVICE - BY PLACEMENT STATUS AFTER LEAVING JOB
CORPS, AND BY EDUCATIONAL LEVEL

<u>NON-HIGH SCHOOL GRADUATES</u>				
	<u>JOB</u>	<u>ARMED FORCES</u>	<u>SCHOOL</u>	<u>TOTAL</u>
<u>TOTAL JOB CORPS</u>	75.8	6.8	17.4	100.0
SERVICE ENTRANTS	58.1	24.7	17.2	100.0
NON-ENTRANTS	79.7	2.8	17.5	100.0
% ENTERED	14.0	66.3	18.0	18.2
<u>GED</u>				
	<u>JOB</u>	<u>ARMED FORCES</u>	<u>SCHOOL</u>	<u>TOTAL</u>
<u>TOTAL JOB CORPS</u>	77.1	12.5	10.4	100.0
SERVICE ENTRANTS	61.2	29.0	9.8	100.0
NON-ENTRANTS	85.4	3.8	10.8	100.0
% ENTERED	27.3	79.9	32.2	34.4
<u>HIGH SCHOOL GRADUATES</u>				
	<u>JOB</u>	<u>ARMED FORCES</u>	<u>SCHOOL</u>	<u>TOTAL</u>
<u>TOTAL JOB CORPS</u>	80.8	9.4	9.8	100.0
SERVICE ENTRANTS	54.5	38.4	7.1	100.0
NON-ENTRANTS	87.0	2.5	10.5	100.0
% ENTERED	13.0	78.6	13.9	19.3
<u>TOTAL</u>				
	<u>JOB</u>	<u>ARMED FORCES</u>	<u>SCHOOL</u>	<u>TOTAL</u>
<u>TOTAL JOB CORPS</u>	75.5	7.7	16.8	100.0
SERVICE ENTRANTS	57.9	26.4	15.7	100.0
NON-ENTRANTS	79.9	3.0	17.1	100.0
% ENTERED	15.6	69.2	18.9	20.3

Table 31 provides reading test score distributions by educational level for Job Corps personnel entering or not entering the service. Overall, only 22.5% of the Job Corps personnel received reading test scores indicating a reading level of greater than eighth grade. About one-third (31.5%) of the Job Corps personnel entering the service received a reading grade level greater than eighth grade.

The distribution of reading grade levels for GED holders was considerably higher (a greater percentage of high reading scores) than those for the non-high school graduates or the high school graduates. Over one-half (52.3%) of the GED holders received reading grade levels above that of the typical eighth grader. Only 17.7% of the non-high school graduates and 38.1% of the high school graduates scored that well on the reading test.

In each of the educational categories, the reading scores of the service entrants tended to exceed those of the non-service entrants. This should be expected, primarily because the services use a paper and pencil aptitude test as one of their selection screening instruments.

Table 32 reports the mental group distributions for Job Corps and non-prior service entrants into the military. The mental groups are based upon Armed Services Vocational Aptitude Battery (ASVAB) scores recorded on the services' data files. The data in Table 32 reveal that in each of the seven years for which data are available, most of the Job Corps entrants into the military received scores putting them in mental groups three or four. The percentages of Job Corps entrants into the military scoring in mental groups three or four exceed the percentages of non-prior service males scoring in those mental groups.

Table 33 provides data concerning the general types of Job Corps vocational training possessed by those Job Corps personnel who entered or

TABLE 31. CHARACTERISTICS OF JOB CORPS TRAINEES ENTERING
SERVICE - READING LEVEL TEST SCORE, AND APPROXI-
MATE READING GRADE LEVEL

<u>NON-HIGH SCHOOL GRADUATES</u>					
Test Score: Reading Grade Level	<u>1-9</u> <u>4th</u>	<u>10-14</u> <u>5th-6th</u>	<u>15-19</u> <u>7th-8th</u>	<u>20-25</u> <u>> 8th</u>	<u>TOTAL</u>
<u>TOTAL JOB CORPS</u>	31.0	28.0	23.3	17.7	100.0
SERVICE ENTRANTS	14.3	25.3	31.1	29.3	100.0
NON-ENTRANTS	34.8	28.6	21.5	15.1	100.0
% ENTERED	8.4	16.5	24.3	30.1	18.2
<u>GED</u>					
<u>TOTAL JOB CORPS</u>	5.2	13.6	28.9	52.3	100.0
SERVICE ENTRANTS	3.3	11.6	29.8	55.3	100.0
NON-ENTRANTS	6.2	14.5	28.5	50.8	100.0
% ENTERED	21.4	29.2	35.1	35.9	34.0
<u>HIGH SCHOOL GRADUATES</u>					
<u>TOTAL JOB CORPS</u>	17.3	20.0	24.3	38.4	100.0
SERVICE ENTRANTS	10.6	22.2	30.2	37.0	100.0
NON-ENTRANTS	18.8	19.5	23.0	38.7	100.0
% ENTERED	11.2	20.3	22.7	17.5	18.2
<u>TOTAL</u>					
<u>TOTAL JOB CORPS</u>	27.2	26.1	24.2	22.5	100.0
SERVICE ENTRANTS	11.9	22.5	31.1	34.5	100.0
NON-ENTRANTS	31.0	27.0	22.5	19.5	100.0
% ENTERED	8.7	17.1	25.5	30.5	19.9

TABLE 32. MENTAL GROUP PERCENTAGES FOR JOB CORPS AND
NON-PRIOR SERVICE MALE ENTRANTS TO THE
MILITARY

MENTAL GROUP	RECRUIT GROUP	FISCAL YEAR OF SERVICE ENTRANCE						
		1971	1972	1973	1974	1975	1976	1977
I	NPS MALE RECRUITS JOB CORPS RECRUITS	5.0 0.6	4.2 0.4	3.7 0.3	2.8 0.5	3.3 0.5	4.5 1.2	6.5 1.0
II	NPS MALE RECRUITS JOB CORPS RECRUITS	30.2 8.3	30.9 8.6	31.1 13.2	30.6 12.1	32.8 16.2	35.0 16.3	32.4 9.5
III	NPS MALE RECRUITS JOB CORPS RECRUITS	43.5 46.6	48.2 53.3	51.8 65.6	56.3 67.9	57.5 76.2	55.5 74.0	56.4 73.7
IV	NPS MALE RECRUITS JOB CORPS RECRUITS	21.3 44.5	16.7 37.7	13.4 20.9	10.3 19.5	6.4 7.1	5.0 8.5	4.7 9.8
	TOTALS	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0

NOTE: Mental groups are based upon ASVAB percentile scores: I = 93-100, II = 65-92, III = 31-64,
IV = 10-30.

TABLE 23.
CHARACTERISTICS OF JOB CORPS TRAINEES ENTERING SERVICE
JOB CORPS OCCUPATIONAL CLUSTER CODES^a

Non-High School Graduates											
	Sub- Prof.	Clerical & Sales	Service Fields	Forestry/ Farming	Food Service	Auto- Repair	Con- struction	Electrical Repair	Indus- trial	Transpor- tation	Health
											Other
Total Job Corps	25.6	22.5	16.9	18.2	17.9	19.6	19.7	24.2	18.6	20.2	26.4
Service Entrants	.6	1.1	6.8	1.1	9.1	18.1	29.9	2.3	12.6	1.5	.8
Non Entrants	.8	1.3	6.1	1.1	8.6	19.1	21.5	2.9	12.6	1.6	1.2
% Entered Service	.5	1.1	6.9	1.1	9.2	17.9	29.6	2.1	12.6	1.4	.8
	25.6	22.5	16.9	18.2	17.9	19.6	19.7	24.2	18.6	20.2	26.4
Total Job Corps	23	2.1	4.1	1.5	6.6	16.3	42.7	4.4	14.2	1.7	2.3
Service Entrants	2.1	1.9	3.8	1.3	6.8	17.5	41.3	4.8	14.4	1.8	2.5
Non Entrants	2.4	2.3	4.2	1.7	6.5	15.5	43.5	4.2	14.1	1.6	2.1
% Entered Service	34.2	32.7	34.3	31.3	38.0	39.8	35.8	40.2	37.4	39.0	41.5
	34.2	32.7	34.3	31.3	38.0	39.8	35.8	40.2	37.4	39.0	41.5
High School Graduates											
Total Job Corps	17	3.3	5.8	2.1	8.3	12.6	31.6	3.0	12.3	1.6	2.6
Service Entrants	2.0	2.9	4.7	1.9	8.5	14.7	31.4	3.9	13.6	1.7	3.2
Non Entrants	1.6	3.4	6.0	2.2	8.3	12.1	31.6	2.8	12.0	1.6	2.4
% Entered Service	24.1	17.5	16.6	18.3	20.6	23.6	20.1	26.5	22.5	21.1	25.3
	24.1	17.5	16.6	18.3	20.6	23.6	20.1	26.5	22.5	21.1	25.3
Total Job Corps	18	1.3	6.3	1.2	9.3	18.2	30.9	2.7	12.6	1.4	1.0
Service Entrants	1.1	1.5	5.4	1.1	8.9	19.2	32.8	3.5	13.0	1.6	1.4
Non Entrants	.7	1.3	6.5	1.2	9.4	17.9	30.4	2.5	12.5	1.4	.9
% Entered Service	28.4	23.8	18.0	20.5	19.8	22.0	22.1	26.9	21.5	22.8	29.7
	28.4	23.8	18.0	20.5	19.8	22.0	22.1	26.9	21.5	22.8	29.7
TOTAL											
Total Job Corps	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Service Entrants	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Non Entrants	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
% Entered Service	18.7	15.1	26.4	18.7	20.2	15.1	18.7	15.1	18.7	15.1	18.7

a. See Appendix C for occupations within each cluster.
b. Includes draftsman, commercial/graphic artist, cosmetologist, and engineering aide/rodman-chainman.
c. Includes laundry worker, custodial maintenance, security guard/policeman and a miscellaneous category.
d. 7 of the 12 categories (excluding total) in this row contain less than 100 cases.

did not enter the military. The data in Table 33 indicate that the largest percentage of Job Corps trainees in each of the three educational groups took vocational training in construction-related occupations (e.g., carpentry, electrical repair, masonry, plumbing, etc.). Overall, 30.9% of the Job Corps trainees having data on the Job Corps' data file had taken vocational training in construction occupations. Data in Table 10 of this report indicate that 1.8% of the non-prior service (NPS) male military accessions during fiscal years 1976-1978 entered construction occupations in the military. However, individuals trained as electricians (coded as a construction training program) in the Job Corps might readily find military jobs in electronic and electrical/mechanical equipment repair -- two military occupational areas entered by 34% of the NPS males entering the military during fiscal years 1976-1978. (See Table 10 for military occupational data.)

Electrical repair training was taken by only 2.7% of the Job Corps personnel, but as mentioned in the preceding paragraph, 34% of 1976-1978 NPS male accessions entered in electronic or electrical/mechanical equipment repair occupations. Among the GED holders, 4.4% took electrical repair vocational training, and 40.2% of those individuals entered the military. The aforementioned 40.2% service-entry rate shown in Table 33 is exceeded only by the 41.5% of the GEDs who took Job Corps vocational training in "health" and later entered the military. As shown in Table 10, only 4.2% of the 1976-1978 NPS male accessions entered health occupations in the military. (There were about 1.1 million non-prior service male accessions during fiscal years 1976-1978.)

Table 34 provides data concerning length of stay (in days) in the Job Corps. Trainees with GEDs when they terminated Job Corps training tended

to have stayed in the Job Corps for more days than did non-high school graduates or high school graduates. The length-of-stay distributions shown in Table 34 for the high school and the non-high school graduates are quite similar to one another. The modal length-of-stay in the Job Corps for both of the aforementioned educational groups was 1-30 days. In marked contrast, the modal length-of-stay for individuals coded as GED holders was over 360 days.

High school graduates and GED holders with 61-120 days of Job Corps training were the most likely to enter the service. The non-high school graduates most likely to enter the military had been in the Job Corps somewhat longer, i.e., 121-180 days. Overall, individuals who had spent 121-180 days in the Job Corps were the most likely to enter the military.

Table 35 provides data concerning the census regions from which Job Corps trainees came. Overall, the greatest percentage (22.1%) of Job Corps trainees came from the South Atlantic states. The modal non-high school graduate also came from that area. The modal high school graduate Job Corps trainee came from the Pacific states, while the greatest percentage (18.8%) of GED holders came from each of two census regions: the South Atlantic and the Pacific. The New England region provided the fewest Job Corps trainees overall, and in each of the three educational accomplishment groupings.

In total, Job Corps trainees from the West-North Central states had the highest probability (.225) of entering the military. (See Appendix E for the states in the various census regions.) Excluding the region labeled "Other", high school graduates and GED holders from the East-South Central region were the most likely to enlist (25.7% and 41.0%, respectively.) Of the non-high school graduates, those from the West-North Central states

TABLE 35.

CHARACTERISTICS OF JOB CORPS TRAINEES ENTERING SERVICE
CENSUS REGION ^a

<u>Non-High School Graduates</u>										
	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific	Other
Total Job Corps	1.1	11.2	8.9	7.1	23.6	10.9	18.8	5.3	12.4	7
Service Entrants	1.1	12.2	9.8	9.0	21.6	11.1	17.1	1.9	12.1	7
Non-Entrants	1.1	11.1	8.7	6.7	23.9	10.9	19.1	5.4	12.4	7
% Entered	17.3	18.2	18.4	21.3	15.4	17.1	15.2	15.6	16.7	18.8
<u>GED</u>										
Total Job Corps	1.0	10.3	9.5	11.8	18.8	6.8	15.1	6.9	18.8	1.0
Service Entrants	.9	11.2	9.0	10.9	21.8	8.3	17.6	5.9	13.4	1.0
Non-Entrants	1.1	9.9	9.7	12.2	17.3	6.1	13.9	7.4	21.5	.9
% Entered	29.0	36.4	32.0	31.1	38.9	41.0	39.1	25.5	24.0	35.4
<u>High School Graduates</u>										
Total Job Corps	.6	6.6	11.1	8.3	16.8	7.0	17.9	5.4	25.9	.4
Service Entrants	.5	6.3	9.7	6.8	20.5	9.9	20.7	4.2	20.6	.5
Non-Entrants	.7	6.7	11.4	8.6	15.9	6.3	17.3	5.7	27.1	.3
% Entered	12.7	17.3	15.9	15.0	22.2	25.7	21.0	14.3	14.5	37.0
<u>TOTAL</u>										
Total Job Corps	1.1	12.1	12.2	7.1	22.1	9.6	17.0	5.1	12.9	.8
Service Entrants	1.0	12.8	12.9	6.6	21.0	9.9	16.1	4.7	12.1	.9
Non-Entrants	1.1	11.9	12.0	6.7	22.4	9.6	17.2	5.2	13.1	.8
% Entered	17.8	19.6	19.7	22.5	17.6	18.9	17.5	17.1	17.4	19.7

^a Appendix E shows the states in each census region.

were the most likely to enlist (21.3% of non-high school graduate trainees from that region enlisted).

The data in Table 35 can be compared with the data in Table 9. Table 9 shows the percentage distribution of DoD non-prior service male accessions by census region. Compared to total DoD non-prior service accessions for fiscal years 1973-1979, the following regions were under represented: New England, Middle Atlantic (except in 1974), East-North Central, and Mountain. The following regions were over-represented among Job Corps entrants: South Atlantic, West-North Central (except in 1973), East-South Central, and West-South Central. The percentages of Job Corps trainees entering from the Pacific census region were less than among Non-Prior Service (NPS) males during 1973-1979, but more during 1978 and 1979.

Table 36 goes beyond the census region data provided in the preceding table and offers data about the population of the hometowns of Job Corps trainees. As shown in Table 36, the greatest percentage (37.1%) of Job Corps trainees came from hometowns having populations of over 250,000. The second greatest percentage (30.1%) of the trainees came from towns of populations between 2,500 and 50,000.

The modal (32.6%) high school graduate came from hometowns of 2,500 to 50,000 population. The typical GED (35.9%) and the modal non-high school graduate (35.2%) came from cities having populations over 250,000.

Overall, and for each of the three educational accomplishment groups, the military entry rates of former Job Corps trainees did not vary much (by no more than 2.2 percentage points among hometown sizes).

The Automatic Interaction Detector (AID3) (Sonquist, Baker, and Morgan, 1973) and multiple regression were used in an attempt to differentiate Job Corps trainees who joined the military from those who did not. To build

TABLE 36. CHARACTERISTICS OF JOB CORPS TRAINEES
ENTERING SERVICE - SIZE OF ENROLLEE'S
HOMETOWN -

<u>NON-HIGH SCHOOL GRADUATES</u>					
	<u>UNDER 2,500</u>	<u>2,500 TO 50,000</u>	<u>50,000 TO 250,000</u>	<u>OVER 250,000</u>	<u>TOTAL</u>
<u>TOTAL JOB CORPS</u>	15.4	31.2	18.2	35.2	100.0
SERVICE ENTRANTS	15.2	32.7	19.2	32.9	100.0
NON-ENTRANTS	15.4	30.9	17.9	35.8	100.0
% ENTERED	17.0	18.1	18.3	18.1	17.2
<u>GED</u>					
<u>TOTAL JOB CORPS</u>	13.4	32.0	18.7	35.9	100.0
SERVICE ENTRANTS	12.8	32.5	19.0	35.7	100.0
NON-ENTRANTS	13.7	31.7	18.6	36.0	100.0
% ENTERED	32.2	34.4	34.4	33.6	33.8
<u>HIGH SCHOOL GRADUATES</u>					
<u>TOTAL JOB CORPS</u>	17.7	32.6	21.1	28.6	100.0
SERVICE ENTRANTS	17.6	33.1	21.8	27.5	100.0
NON-ENTRANTS	17.7	32.4	21.0	28.9	100.0
% ENTERED	17.8	18.1	18.3	17.1	17.8
<u>TOTAL</u>					
<u>TOTAL JOB CORPS</u>	14.6	30.1	18.2	37.1	100.0
SERVICE ENTRANTS	14.2	31.4	19.1	35.3	100.0
NON-ENTRANTS	14.7	29.8	17.9	37.6	100.0
% ENTERED	18.5	19.8	20.0	18.0	19.0

statistical models using these techniques, the records of 15,744 Job Corps trainees were randomly selected from the file containing 256,188 non-prior service male records (software limitations dictated the sample size). The percentage of men in the sample entering the service was 19.8%, compared to the Job Corps population rate of 18.5%.

The AID3 algorithm uses analysis of variance to search for the best divisions on the predictors being analyzed. "Best" means the largest reduction in error in predicting to which subgroup on each predictor each case belongs. Divisions of the predictors are examined until one of the pre-specified stopping rules is fulfilled. Results of the AID3 analyses were used in selecting variables for inclusion as predictors in multiple regression analyses.

Table 37 presents the results of an AID3 analysis using race, home town size, reading score, age, and GED status as predictors of enlistment. This analysis revealed that individuals 18 years of age or younger who are eligible for GED training in the Job Corps and who completed their GED while in the Job Corps, had the highest military entrance rate (36.4%). The lowest military entrance rate from this analysis was for the group of individuals receiving reading scores of less than 10 (4th or lower reading grade level). It seems likely that individuals in this group would have problems receiving acceptable scores on the ASVAB.

Table 38 presents the results of a multiple regression analysis using entry/nonentry into the military as the dependent variable ("1" = entry, and "0" = nonentry). The equation in Table 38 is presented, even though it has a very modest multiple R, because it yielded a significant correlation (an R^2 of .058) when the equation was applied to the records of 11,917 new cases. That is, the equation crossvalidated. Equations with interactive

TABLE 37. AID3 ANALYSIS OF MILITARY ENLISTMENT USING
SELECTED JOB CORPS VARIABLES AS PREDICTORS

<u>GROUP DESCRIPTION</u> ^b	<u>NO. IN GROUP</u>	<u>% OF GROUP ENTERING MILITARY</u>	^a <u>PERCENTAGE OF ENTIRE JOB CORPS MILITARY POPULATION</u>
I. ELIGIBLE FOR GED TRAINING IN JOB CORPS, AND:			
A. AGE ENTERING JOB CORPS ≤ 18 AND:			
1. COMPLETED GED	1274	38.4	15.7
2. DID NOT COMPLETE GED AND:			
a. B-SCORE ≥ 15	1464	32.7	15.3
b. ≥ 10 B-SCORE ≤ 15	591	20.0	3.8
c. NO B-SCORE RECORDED	989	22.8	6.5
B. AGE ENTERING JOB CORPS ≥ 18	955	15.8	4.8
II. NOT ELIGIBLE FOR GED TRAINING IN JOB CORPS AND:			
A. B-SCORE ≥ 15 AND:			
1. AGE < 18	1403	28.6	12.8
2. AGE ≥ 18	943	19.9	6.1
B. $10 \leq$ B-SCORE ≤ 15	2015	17.1	11.1
C. NO B-SCORE RECORDED	2921	15.0	14.0
III. B-SCORE < 10	3289	9.3	9.9
TOTAL	15744		100.0

a. Calculated as: number entering military from this Job Corps Groups \div total number of Job Corps entrants into the military.

b. Ineligible-for-GED group includes: 1) those who scored too low to qualify for GED training; and 2) those who already had a GED or a high school diploma. Eligible-for-GED group includes everyone else, except for individuals with an unknown educational status. On the total Job Corps file, the following Ns were found:

Passed GED	21,711
Failed GED	2,945
Incomplete	11,603
Ineligible	161,569
Eligible, but not enrolled	13,589
Unknown	22,871
Total	256,288

NOTE: This analysis accounted for 5.0% of the variance in the end state did not enlist criterion.

TABLE 38. ENLISTMENT OF JOB CORPS TRAINEES IN THE
MILITARY: REGRESSION RESULTS USING JOB
CORPS VARIABLES AS PREDICTORS

CONSTANT = 2.311	REGRESSION COEFFICIENT
READING LEVEL ("B" SCORE)	0.119
JOB CORPS TERMINATION YEAR (RANGE = 70 TO 78)	-.0247
AGE AT ENTRY TO JOB CORPS	-.0349
ELIGIBLE FOR GED TRAINING (0 = NO, 1 = YES)	.0706
HIGHEST YEAR OF EDUCATION COMPLETED	.015
R^2	.0943
N = 15,744	

NOTE: All statistics are significant at .05 level. The dependent variable, entry/nonentry into the military, was coded 1/0.

predictors did not hold up on crossvalidation. In any case, attempts to build a model using Job Corps variables to predict which trainees would join the military did not yield a practically useful model.

The statistical concepts embodied in AID3 may not have received a totally fair trial in this research. Several software shortcomings hampered the usefulness of AID3 with the large data files used in this project. AID3 utilizes single precision arithmetic (approximately eight decimal places of accuracy), and this caused computational difficulties when the number of cases exceeded about 16,000. In addition to the single precision problem, required computer time became a problem. The AID3 analyses required times of approximately four minutes of CPU time and one hour of clock time to process about 16,000 cases (using an IBM 360/67). These times were reached only after using high speed drum storage for part of the AID3 program itself in order to reduce input/output slowdowns.

CHAPTER SUMMARY

This chapter presented data concerning Job Corps trainees. More specifically, the chapter examined the characteristics of Job Corps trainees entering the military and compared them with trainees not entering the military.

Preliminary screenings of the records of 391,552 individuals enrolled as Job Corps trainees during 1970-1978 yielded the records of 256,188 non-prior male military service Job Corps trainees whose data could be used. The services' enlistment data tapes were analyzed to determine how many of the 256,188 individuals had enlisted. This analysis yielded the records of 47,522 non-prior service males who had been in the Job Corps during 1970-1978, and who had entered the military during fiscal years 1971-1979. Therefore, about 18.5% of the non-prior military service male Job Corps trainees had entered the service after leaving the Job Corps.¹

Educational attainment information from the Job Corps' and the services' data files showed some strong disagreements. Some of the disagreements may have occurred because individuals pursued their education after leaving the Job Corps and before entering the military. This would help to explain the difference between the percentage of high school graduates among Job Corps trainees entering the military from Job Corps and military data files. The military files showed 19.3% high school graduates, while the Job Corps data showed 4.9% were high school graduates.

1 Data from only Job Corps trainees who had never been in the military before joining the Job Corps were used; data from individuals who had been in the military before joining the Job Corps were excluded from the study. The records of 5,759 prior-service males who were Job Corps trainees were therefore not used in the study.

The military and the Job Corps' data files agreed quite well on the percentage of GEDs among the Job Corps trainees entering the military. (Job Corps educational status was recorded at termination of Job Corps training.) The Job Corps file indicated 16.4% of the trainees entering the military were GEDs, while the service data indicated 17.6% were GEDs. This agreement between the two percentages hides a considerable amount of shuffling of educational status between the two data files, however. Of the 7,101 Job Corps trainees who entered the military, only 3,843 were recorded as GEDs by the military. Over 1,200 of the individuals coded as GEDs by the Job Corps were labeled as non-high school graduates by the military. This particular migration between educational levels is not easy to explain. On the other hand, the migration of 1,905 individuals from GED status, according to Job Corps data, to high school graduate status, according to the military, was due, one hopes, to people finishing high school diplomas after leaving the Job Corps.

The percentage of male Job Corps trainees who eventually entered the military declined steadily from 1969 to 1978 (year of entry to the Job Corps). Entry percentages for 1978-1979 are undoubtedly somewhat reduced from what they will eventually be, because the services' accessions files covered the fiscal years 1971-1979, and some trainees may not have even left the Job Corps by the end of fiscal year 1979.

The percentages of Job Corps trainees from each of the educational attainment categories (high school graduate, non-high school graduate, and GEDs) entering the military also declined during the period covered by the data (years of entry to the Job Corps of 1969-1978).

Data from Job Corps files revealed that over three-fourths (78.1%) of the GED holders were coded as having completed their Job Corps training.

This contrasts with 38.4% for high school graduates and 19.4% for non-high school graduates. Additionally, only 7.1% of the GED holders who left the Job Corps left for AWOL or disciplinary reasons, while 35.1% of the non-high school graduates and 20.9% of the high school graduates who left the Job Corps left for those reasons. Overall, a higher percentage (23.5%) of individuals who were 16 years of age when they joined the Job Corps eventually entered the military than was the case for any other age group. This was also the Job Corps entry age for which non-high school graduates and GEDs were most likely to enter the military. Overall, former Job Corps trainees who entered the military were younger than non-prior service male enlistees in general.

Blacks constituted the majority (58.1%) of the individuals having data on the Job Corps file. Blacks also formed the modal group in each of the three educational accomplishment groups. Black GED holders were more likely to enter the military than were GEDs of other ethnic groups. Overall, 53.6% of the Job Corps trainees entering the service were black. Among non-high school graduates and high school graduates, whites had the highest rate of entry into the service. Statistical analyses demonstrated that white Job Corps trainees who later entered the military tended to have finished fewer years of education than had minority individuals.

Most (57.9%) of the former Job Corps trainees who joined the military had left the Job Corps for a job, rather than for the military. On the other hand, about 31% of those trainees whose post-Job Corps placement was to the military did not have records on military enlistment data files. Over 60% (61.2%) of the GED holders among the former Job Corps trainees who

entered the military had left the Job Corps for a job. GED holders who left the Job Corps with a placement status of "school" had a service entrance rate of 32.2%.

Reading test scores from the Job Corps' data file showed that only 22.5% of the trainees scored above the eighth reading grade level. About one-third (34.5%) of Job Corps personnel entering the military received reading scores above the eighth reading grade level. Job Corps trainees who were GED holders received, on average, higher reading scores than did high school graduates or non-high school graduates. Over one-half (52.3%) of the GED holders received reading scores above eighth reading grade level.

Mental group distributions formed using the scores obtained on the Armed Services Vocational Aptitude Battery (ASVAB) revealed that, for each of the seven years (1971-1977) for which data were available, most (up to 91%) of the Job Corps trainees entering the military scored in mental groups three and four. Mental groups three and four encompass the percentile scores of 10-64. Individuals scoring in mental group five are not enlisted by the military.

The largest percentage of Job Corps trainees overall, and in each of the three educational accomplishment groups, had taken vocational training in construction occupations (e.g., carpentry, electrician, masonry, plumbing, etc.). Over one-fifth (22.1%) of the Job Corps trainees who took training in construction fields entered the military.

For GED holders, those who had taken electrical repair training or health training in the Job Corps had the highest percentages of personnel entering the military, 40.2% and 41.5%, respectively. However, only 4.4%

and 2.5% of the Job Corps trainees who were GED holders had taken vocational training in electrical repair and health, respectively.

Overall (aggregated over the educational accomplishment groups), the highest service entrance rate (29.7%) was for Job Corp trainees who have taken training in health occupations. This percentage must be viewed, however, in light of the percentage of Job Corps trainees who take training in health occupations (1.0%). As mentioned above, most trainees (30.9%) enrolled in construction training, and 22.1% of those trainees entered the military.

Trainees who had GEDs when they terminated Job Corps training tended to have stayed in the Job Corps for more days than had high school graduates or non-high school graduates. The modal length of enrollment in the Job Corps for trainees who had GEDs when they terminated their training was over 360 days, and about 61% had stayed longer than 240 days.

High school graduates with 61-120 days of Job Corps training were the most likely to enter the military of the high school graduate groups. Overall, individuals who had spent 121-180 days in the Job Corps were most likely to enter the military.

The modal (22.1%) Job Corps trainee came from the South Atlantic States. The New England region provided the lowest percentage of Job Corps trainees. The South Atlantic and the Pacific census regions each provided 18.8% of the Job Corps trainees who were GED holders when they terminated their Job Corps training. The modal high school graduate among the Job Corps trainees came from the Pacific census region.

Overall, Job Corps trainees from the West-North Central states had the highest probability (.225) of entering the military. High school graduates and GED holders were most likely to enlist if they came from the East-South

Central states (25.7% and 41.0%, respectively). The West-North Central states provided the non-high school graduates who were the most likely to enlist (21.3%).

The typical Job Corps trainee came from cities having populations of over 250,000. The modal high school graduate came from home towns having populations of 2,500-50,000. The typical GED and the typical non-high school graduate came from cities having populations over 250,000.

Statistical analysis revealed that individuals 18 years old or younger when they entered the Job Corps, who were eligible for Job Corps GED training, and who completed their GED while in the Job Corps, had a high (38.4%) rate of entry into the military. At the other extreme, only 9.3% of the Job Corps trainees receiving reading scores of the fourth reading grade level or lower entered the military. Additional statistical analyses revealed that the probability of entering the military was related to reading level, year in which Job Corps training was terminated, age at entry into Job Corps, eligibility for GED training while in the Job Corps, and highest year of education completed.

While this chapter has discussed the relationships among Job Corps variables and entering/not entering the military, the next chapter examines the success rates of Job Corps trainees who entered the military.

CHAPTER IV
THE RELATIONSHIPS OF JOB CORPS EXPERIENCE
TO SUCCESS IN THE MILITARY

The preceding chapter examined the characteristics of Job Corps trainees who entered the military. This chapter examines the success rates of those Job Corps trainees who entered the military.

To review briefly, Job Corps data files covering the period 1970-1978 were used as a major data source. Preliminary screening to eliminate duplicate records, incomplete records, records of females, and records of prior-military service males, yielded a file including 256,188 non-prior military service males who had been Job Corps trainees during the period 1970-1978. This file of Job Corps records was passed against military service accession data files for fiscal years 1971-1979. The records of 47,522 non-prior service males who entered the military after having been Job Corps trainees were found. This is a service entrance rate of about 18.5% ($47,522 \div 256,188$).

Table 39 presents data about the success rates in the military of former Job Corps trainees. The data are organized by level of educational accomplishment, using educational accomplishment information from the Job Corps' files, and success/nonsuccess information from the services' data files. In all of the tables in this chapter, "success" is defined as still on active duty at the end of three years, or had completed an enlistment with a honorable discharge, or had entered an officer program.

The percentage success data in Table 39 reveal high school graduates had a success rate of 60.8%, GED holders a success rate of 53.6%, and

TABLE 39.
CHARACTERISTICS OF JOB CORPS TRAINEES ENTERING MILITARY SERVICE ^a
WHO SUCCESSFULLY COMPLETED FIRST THREE YEARS OF ACTIVE DUTY
- YEAR OF ENTRY INTO JOB CORPS -

Non-High School Graduates									
	1969	1970	1971	1972	1973	1974	1975	1976	Total ^c
Total Entrants	3.0	12.1	19.8	24.5	19.4	14.1	6.5	.6	100.0
Successful	4.4	14.1	20.2	23.3	18.1	13.1	6.3	.5	100.0
Non-Successful	2.2	10.8	19.6	25.2	20.3	14.7	6.6	.6	100.0
% Successful	56.7	45.8	40.1	37.4	36.7	36.4	38.0	36.2	39.3
GED									
Total Entrants	3.4	10.8	19.1	23.7	20.2	15.2	7.5	.2	100.0
Successful	4.1	10.9	20.2	22.7	18.9	15.8	7.2	.2	100.0
Non-Successful	2.7	10.6	17.8	24.7	21.6	14.6	7.8	.2	100.0
% Successful	63.6	54.1	56.6	51.5	50.4	55.5	51.6	55.6	53.6
High School Graduates ^b									
Total Entrants	1.8	8.8	18.7	23.4	18.1	14.8	13.2	1.2	100.0
Successful	2.1	9.2	18.7	24.7	16.6	13.8	13.4	1.5	100.0
Non-Successful	1.3	8.1	18.6	21.4	20.6	16.3	12.7	.8	100.0
% Successful	72.2	63.6	60.6	64.3	55.5	56.8	62.1	75.0	60.8
TOTAL									
Total Entrants	3.2	11.9	20.0	24.8	18.9	13.6	7.1	.5	100.0
Successful	4.3	13.2	20.4	23.6	17.7	13.1	7.2	.5	100.0
Non-Successful	2.3	10.9	19.7	25.7	19.9	13.9	7.0	.6	100.0
% Successful	57.7	47.0	43.3	40.3	39.5	41.2	43.0	42.4	42.4

^a Between 1 July 72 and 30 June 76.

^b A small category - 1 033 valid cases - in any categories contain less than 100 cases

Note: Missing cases - 24 024 due to missing educational and/or entry-year data.

non-high school graduates a 39.3% success rate. These rates can be compared with the total fiscal years 1973-1976 non-prior service male success rates given in Table 12. The rates in Table 12 show the following percentages of success: high school graduates, 74.9%; GED holders, 51.1%; and non-high school graduates, 50.5%. An interesting finding, then, is that high school graduates and non-high school graduates who were Job Corps trainees have considerably lower probabilities of success in the military than do their counterparts among the non-Job Corps service entrant groups. On the other hand, individuals who had their GEDs when they left the Job Corps had a slightly higher percentage of success in the military (53.6% vs. 51.1%) than did their counterparts who had not been in the Job Corps.

The percentage of former Job Corps trainees successful in the military shows rather surprising variation over the years for which data were available. This variation is present in the data for each of the three educational categories, and for the total group. The variation in the success percentage may have been driven by changes in the services' enlistment and discharge procedures, and in the services' requirements for manpower. The move to an all-volunteer military force (AVF) in 1973 might, for instance, have led recruiters to focus on fairly accessible groups such as Job Corps trainees. (The draft expired in June 1973, but the last draft call occurred six months before that.)

Table 40, which is organized in the same way as Table 39 except that it gives year of termination from the Job Corps rather than year of Job Corps entry, supports the notion that the transition to the AVF may have produced a surge in the recruitment by the military of Job Corps trainees. The data in Table 40 reveal that Job Corps trainees terminating their training in 1972 formed the modal group of enlistees from the year groups

TABLE 40.
CHARACTERISTICS OF JOB CORPS TRAINEES ENTERING MILITARY SERVICE^a
WHO SUCCESSFULLY COMPLETED FIRST THREE YEARS OF ACTIVE DUTY
- YEAR OF TERMINATING JOB CORPS PARTICIPATION -

<u>Non-High School Graduates</u>							
	1970	1971	1972	1973	1974	1975	1976
<u>Total Entrants</u>							Total
Successful	9.9	16.3	25.1	21.6	16.5	8.6	100.0
Non-Successful	11.5	17.1	24.6	20.6	15.4	8.8	100.0
% Successful	8.6	15.9	25.8	22.2	17.3	8.4	100.0
	46.0	41.2	38.3	37.5	36.6	40.5	39.1
<u>GED</u>							
<u>Total Entrants</u>	4.9	11.4	22.9	21.1	19.2	13.5	106.0
Successful	4.9	12.0	23.1	22.4	19.4	15.6	100.0
Non-Successful	5.0	10.8	22.6	26.0	18.9	13.4	106.0
% Successful	53.6	56.1	54.1	49.9	54.3	54.0	53.5
<u>High School Graduates^b</u>							
<u>Total Entrants</u>	5.7	13.3	24.9	20.9	14.0	16.7	100.0
Successful	5.2	12.0	27.1	20.3	12.3	16.7	100.0
Non-Successful	6.4	13.7	21.6	21.9	16.5	16.8	100.0
% Successful	56.1	59.4	66.0	59.0	63.6	60.7	60.8
<u>TOTAL</u>							
<u>Total Entrants</u>	9.3	15.4	25.4	21.6	16.1	9.8	100.0
Successful	10.2	15.6	24.9	20.4	15.5	10.4	100.0
Non-Successful	8.7	15.2	25.8	22.5	16.6	9.3	100.0
% Successful	46.6	43.0	41.7	40.2	40.9	45.4	42.5

^a Between 1 July 72 and 30 June 76

^b A small category - 1,003 valid cases - many categories contain less than 100 cases.

1970-1976, i.e., they were 25.4% of the total group, 24.9% of the high school graduates, and 25.3% of the non-high school graduates. For the GED group, however, 1973 was the modal year, as can be seen in Table 40.

Table 41 provides data on success rates of Job Corps trainees who entered the military, with the success rates categorized by reason for discharge from the Job Corps. The following Job Corps discharge reasons were associated with lower (compared to other rates in Table 41) overall service success rates: medical, resigned, AWOL (absent without leave), and disciplinary discharge. Completion of Job Corps training was the only discharge reason associated with a higher than average success rate in each of the three educational attainment categories. Overall, individuals who enlisted after completing the Job Corps had a success rate of 55.5%. This percentage compares with the total military success rate of 42.6% for former Job Corps trainees.

Withdrawal of parental consent was related to slightly lower service success rates for non-high school graduates and GED holders, but higher service success rates for high school graduates. Medical reasons for leaving the Job Corps were associated with higher military success rates for GEDs, but not for non-high school graduates or for high school graduates - in the latter two groups medical reasons for leaving the Job Corps were associated with low military success rates.

Table 42 presents service success percentages organized by age at Job Corps entry and educational level. Overall, among the age groups, individuals who were 19 years old when they entered the Job Corps had the highest service success rate (49.6%), but the age with the highest success rate for each educational category varied. By educational level, the following ages at Job Corps entry had the highest service success percentages: high school

TABLE 41.
CHARACTERISTICS OF JOB CORPS TRAINEES ENTERING MILITARY SERVICE^a
WHO SUCCESSFULLY COMPLETED FIRST THREE YEARS OF ACTIVE DUTY
-REASON FOR LEAVING JOB CORPS-

	Non-High School Graduates							Disciplinary ^b Discharge	Total
	Completion	Maximum Benefits	Resigned	Withdrawal of Parental Consent	Administrative Discharge	Medical	AWOL		
Total Entrants	22.5	.5	33.8	2.9	4.3	.4	25.7	9.9	100.0
Successful	30.7	.5	31.0	2.8	4.1	.1	22.8	8.0	100.0
Non Successful	17.2	.5	35.6	3.0	4.4	.5	27.7	11.1	100.0
% Successful	53.8	39.5	36.2	38.0	37.1	14.1	34.9	32.0	39.4
GED									
Total Entrants	76.6	.5	13.4	.5	.6	.1	5.0	3.2	100.0
Successful	79.9	.4	11.3	.5	.8	.1	4.9	2.1	100.0
Non Successful	72.7	.7	15.9	.5	.4	.1	5.3	4.4	100.0
% Successful	56.0	41.7	45.2	52.6	68.0	60.0	51.7	35.3	53.6
High School Graduates ^c									
Total Entrants	35.8	.7	35.0	2.3	3.2	.6	16.2	5.2	100.0
Successful	43.1	.3	31.7	3.0	3.5	.1	14.5	3.8	100.0
Non Successful	26.9	1.3	10.3	1.3	2.8	1.3	18.7	7.1	100.0
% Successful	71.3	24.6	55.0	78.3	65.6	16.7	54.7	44.2	60.8
TOTAL									
Total Entrants	31.7	.5	30.8	2.4	3.6	.4	21.9	8.7	100.0
Successful	41.3	.4	27.5	2.2	3.3	.2	14.6	6.5	100.0
Non Successful	24.6	.5	33.3	2.5	3.9	.6	24.3	10.3	100.0
% Successful	55.5	37.0	37.9	40.1	38.8	19.3	36.1	31.9	42.6

^a Between 1 July 72 and 30 June 76

^b Includes resignation in lieu of disciplinary action

^c A small category- 536 valid cases-many categories less than 100 cases.

TABLE 42. CHARACTERISTICS OF JOB CORPS TRAINEES ENTERING
MILITARY SERVICE^a WHO SUCCESSFULLY COMPLETED
FIRST THREE YEARS OF ACTIVE DUTY - AGE IN
YEARS AT JOB CORPS ENTRY -

NON-HIGH SCHOOL GRADUATES								
	16	17	18	19	20	21+	TOTAL	MEAN
TOTAL ENTRANTS	46.4	30.8	13.0	6.1	2.7	1.0	100.0	16.9
SUCCESSFUL	43.0	31.4	14.7	6.9	2.9	1.1	100.0	17.0
NON-SUCCESSFUL	48.7	30.3	11.9	5.6	2.5	1.0	100.0	16.9
% SUCCESSFUL	36.5	40.3	44.5	44.4	42.7	42.7	39.4	
GED								
TOTAL ENTRANTS	43.6	33.2	13.3	6.0	2.7	1.2	100.0	16.9
SUCCESSFUL	41.1	33.8	13.9	6.4	3.5	1.3	100.0	17.0
NON-SUCCESSFUL	46.5	32.6	12.7	5.5	1.7	1.0	100.0	16.9
% SUCCESSFUL	50.6	54.6	55.8	57.6	70.3	59.2	53.6	
HIGH SCHOOL GRADUATES ^b								
TOTAL ENTRANTS	.4	7.7	34.4	30.1	18.7	8.7	100.0	18.9
SUCCESSFUL	.5	7.7	35.2	31.5	16.7	8.4	100.0	18.8
NON-SUCCESSFUL	.2	7.6	33.1	28.0	21.9	9.2	100.0	18.9
% SUCCESSFUL	75.0	61.0	62.3	63.6	54.3	58.6	60.8	
TOTAL								
TOTAL ENTRANTS	44.2	30.3	13.8	7.0	3.3	1.4	100.0	17.0
SUCCESSFUL	40.3	30.6	15.6	8.2	3.8	1.5	100.0	17.1
NON-SUCCESSFUL	47.1	30.0	12.6	6.2	2.9	1.2	100.0	16.9
% SUCCESSFUL	38.8	43.0	47.8	49.6	49.3	48.3	42.5	

a. Between 1 July 1972 and 30 June 1976.

b. A small category - 1003 cases.

graduates, 16 years old at entry to the Job Corps (75.0%); GEDs, 20 years old (70.3%), and non-high school graduates, 18 years old (44.5%).

The lowest age group success percentage of either the GEDs (50.6%) or the high school graduates (54.3%) exceeded the highest success percentage of the non-high school graduates (44.5%). The service success rate of some GED age groups exceed the success rates of some of the high school graduate age groups. The 70.3% success rate for GEDs who were 20 years old at time of Job Corps entry is particularly noteworthy, as it is exceeded by only one success rate among the individuals who were high school graduates when they left the Job Corps (75.0% for the group who were 16 years old at Job Corps entry -a numerically very small group with about four members).

Table 43 presents service success percentages by educational level and by racial group. Overall, and in each of the educational accomplishment groups, Job Corps trainees who were Asian-American had the highest service success rates. The highest rate (91.2%) in the table was for GED holders who were Asian-American. Unfortunately for the military, this "good risk" group constituted only .8% (about 400 men) of the total Job Corps entrants to the military.

By educational accomplishment level, the groups with the lowest service success rates were the following: white high school graduates (49.0%); American Indian GED holders (44.8%); and American Indian non-high school graduates (28.9%).

Table 44 displays the success rates of the educational accomplishment categories and by reading performance level. The data in the table show that, while overall 63.4% of the trainees who entered in military read at

TABLE 43. CHARACTERISTICS OF JOB CORPS TRAINEES ENTERING
MILITARY SERVICE^a WHO SUCCESSFULLY COMPLETED
FIRST THREE YEARS OF ACTIVE DUTY - RACE -

<u>NON-HIGH SCHOOL GRADUATES</u>						
	<u>WHITE</u>	<u>BLACK</u>	<u>SPANISH</u>	<u>ASIAN</u>	<u>INDIAN</u>	<u>TOTAL</u>
<u>TOTAL ENTRANTS</u>	36.5	53.3	7.9	.9	1.4	100.0
SUCCESSFUL	30.8	56.6	10.2	1.4	1.0	100.0
NON-SUCCESSFUL	40.2	51.2	6.4	.5	1.7	100.0
% SUCCESSFUL	33.0	41.6	50.6	64.0	28.9	39.2
<u>GED</u>						
<u>TOTAL ENTRANTS</u>	34.5	54.1	9.3	.6	1.5	100.0
SUCCESSFUL	32.4	54.0	11.3	1.0	1.3	100.0
NON-SUCCESSFUL	37.0	54.2	6.9	.1	1.8	100.0
% SUCCESSFUL	50.4	53.7	65.6	91.3	44.8	53.8
<u>HIGH SCHOOL GRADUATES^b</u>						
<u>TOTAL ENTRANTS</u>	26.3	63.6	6.9	2.1	1.1	100.0
SUCCESSFUL	21.1	67.1	7.8	2.8	1.2	100.0
NON-SUCCESSFUL	34.3	58.2	5.5	1.0	1.0	100.0
% SUCCESSFUL	49.0	64.3	69.1	81.0	63.6	61.0
<u>TOTAL</u>						
<u>TOTAL ENTRANTS</u>	34.7	54.9	8.2	.8	1.4	100.0
SUCCESSFUL	30.0	57.2	10.4	1.4	1.0	100.0
NON-SUCCESSFUL	38.1	53.2	6.6	.5	1.6	100.0
% SUCCESSFUL	36.7	44.2	53.8	68.5	32.4	42.4

a. Between 1 July 1972 and 30 June 1976.

b. A small category - only 986 valid cases.

TABLE 44. CHARACTERISTICS OF JOB CORPS TRAINEES ENTERING
MILITARY SERVICE^a WHO SUCCESSFULLY COMPLETED
FIRST THREE YEARS OF ACTIVE DUTY -
APPROXIMATE READING GRADE LEVEL

<u>NON-HIGH SCHOOL GRADUATES</u>					
	<u>4th</u>	<u>5th-6th</u>	<u>7th-8th</u>	<u>>8th</u>	<u>TOTAL</u>
<u>TOTAL ENTRANTS</u>	16.3	25.9	30.3	27.5	100.0
SUCCESSFUL	17.6	27.1	29.7	25.6	100.0
NON-SUCCESSFUL	15.5	25.1	30.6	28.8	100.0
% SUCCESSFUL	42.7	41.5	38.8	36.8	39.6
<u>GED</u>					
<u>TOTAL ENTRANTS</u>	3.6	12.4	29.7	54.3	100.0
SUCCESSFUL	3.9	12.8	30.7	52.6	100.0
NON-SUCCESSFUL	3.2	12.0	28.4	56.4	100.0
% SUCCESSFUL	58.3	55.3	55.7	52.0	53.8
<u>HIGH SCHOOL GRADUATES^b</u>					
<u>TOTAL ENTRANTS</u>	10.6	23.2	30.7	35.5	100.0
SUCCESSFUL	10.0	24.3	32.0	33.7	100.0
NON-SUCCESSFUL	11.5	21.4	28.8	38.3	100.0
% SUCCESSFUL	57.5	64.0	63.4	57.8	60.9
<u>TOTAL</u>					
<u>TOTAL ENTRANTS</u>	13.5	23.1	30.5	32.9	100.0
SUCCESSFUL	13.6	23.5	30.4	32.5	100.0
NON-SUCCESSFUL	13.3	22.8	30.7	33.2	100.0
% SUCCESSFUL	43.1	43.3	42.4	42.1	42.6

a. Between 1 July 1972 and 30 June 1976.

b. A small category - 755 valid cases.

or above the seventh reading grade level (RGL), 84% of the GED holders read at or above the seventh RGL. The data also show that 13.5% of the Job Corps trainees who entered the military had RGLs of four or less.

The relationship between RGL and percentage successful in the military is not what one would expect. Research done by the services has typically found a positive relationship between RGL and success in the service (see, for instance: Aiken, Duffy, and Nugent, 1977). The results in Table 44 reveal that it was the poorest readers from among the GEDs and non-high school graduates who tended to have the highest percentages of success in the military. There is no ready explanation available for this result, but it is suspected that these individuals may have been selected into the military because they stood out (positively) on some other attribute, and/or they entered service occupations that did not require high levels of literacy and which had low personnel attrition rates.

Table 45 shows the military success percentages associated with different lengths of stay (in days) in the Job Corps. Overall, and for each of the three educational accomplishment groups separately, the groups of individuals who stayed in the Job Corps for more than 360 days had the highest service success rate.

The relationship between length of stay in the Job Corps and percentage of success in the military is monotonic and positive. The ordinal relationship between length of Job Corps stay and percentage successful in the military in the three separate educational accomplishment groups, although not perfect, is very strong. It seems fair to say that, on average, longer stays in the Job Corps are associated with higher probabilities of success in the military than are shorter Job Corps stays.

TABLE 45. CHARACTERISTICS OF JOB CORPS TRAINEES ENTERING
MILITARY SERVICE^a WHO SUCCESSFULLY COMPLETED
FIRST THREE YEARS OF ACTIVE DUTY - NUMBER OF
DAYS STAYED IN JOB CORPS -

NON-HIGH SCHOOL GRADUATES								
	1-30	31-60	61-120	121-180	181-240	241-360	360+	TOTAL
TOTAL ENTRANTS	25.8	13.7	18.8	9.0	13.0	11.3	8.4	100.0
SUCCESSFUL	10.0	11.9	17.9	8.5	14.7	14.7	12.3	100.0
NON-SUCCESSFUL	19.6	14.9	19.3	9.3	12.0	9.1	5.8	100.0
% SUCCESSFUL	30.6	34.3	37.6	37.2	44.5	51.3	57.9	39.4
GED								
TOTAL ENTRANTS	.4	2.2	9.4	11.2	20.9	28.6	27.3	100.0
SUCCESSFUL	.3	1.6	8.3	9.5	20.1	28.9	31.3	100.0
NON-SUCCESSFUL	.5	2.8	10.6	13.2	21.8	28.4	22.7	100.0
% SUCCESSFUL	37.5	40.7	47.7	45.3	51.5	54.1	61.5	53.6
HIGH SCHOOL GRADUATES ^b								
TOTAL ENTRANTS	24.1	12.7	18.3	10.6	14.2	14.0	6.1	100.0
SUCCESSFUL	21.0	11.7	17.9	10.0	15.6	16.4	7.4	100.0
NON-SUCCESSFUL	29.1	14.3	18.8	11.5	12.0	10.2	4.1	100.0
% SUCCESSFUL	52.9	55.9	59.6	57.5	66.9	71.4	73.8	60.8
TOTAL								
TOTAL ENTRANTS	21.5	11.9	17.1	9.6	14.3	14.2	11.4	100.0
SUCCESSFUL	16.1	10.0	15.7	8.9	15.7	17.6	16.0	100.0
NON-SUCCESSFUL	25.5	13.4	18.1	10.0	13.2	11.7	8.1	100.0
% SUCCESSFUL	31.9	35.5	39.2	39.6	46.9	52.8	59.5	42.6

a. Between 1 July 1972 and 30 June 1976.

b. A small category - 1001 valid cases, many categories contain less than 100 cases.

Table 46 presents the military success rates by educational accomplishment level and by Job Corps occupational area in which the individual was trained. Overall, the highest percentage of success in the military was for the 3.3% of the Job Corps trainees who entered the military and who had pursued electrical repair training; their success rate was 52.9%.

The electrical repair trainees had the highest percentages of success in the military among the high school graduates (77.8%), and among the non-high school graduates (49.0%). For GED holders, the military success rate of clerical and sales trainees was 62.0%, which slightly exceeded the 61.2% military success rate for GED holders who had taken electrical repair training. On the other hand, clerical and sales trainees had the lowest military success rates among the GED and high school graduate groups.

Overall, and for each of the three educational accomplishment groups, training in construction occupations was the most common type of training among Job Corps personnel entering the military. Over 40% (42.2%) of the GED personnel who entered the military had received Job Corps training in construction occupations.

The data in Table 47 give the military success rate of the educational credential groups by placement status after leaving the Job Corps. The results show that for the total group, and for each of the three educational accomplishment groups, the rank order of the placement groups on survival percentage was from armed forces as the highest, to "job" in the middle, to "school" as the lowest.

The data in Table 47 also show that most trainees left the Job Corps for a job, and the fewest had a placement status of "school". Over 60% of the GED holders among the Job Corps entrants to the military had placement status of "job" when they left the military. The same percentage for high

TABLE 46.
CHARACTERISTICS OF JOB CORPS TRAINEES ENTERING MILITARY SERVICE^a
WHO SUCCESSFULLY COMPLETED FIRST THREE YEARS OF ACTIVE DUTY
JOB CORPS OCCUPATIONAL CLUSTER CODES

Non-High School Graduates

Sub- Prot.	Chemical & Sales	Service Fields	Forestry/ Farming	Food Services	Auto- Repair	Con- struction	Electrical Repair	Indus- trial	Transportation	Health	Other	Total
Total Entrants	8	12	6.1	1.1	8.8	31.8	2.7	12.1	1.6	1.1	14.2	100.0
Successful	7	9	6.0	.9	8.1	32.5	3.3	12.9	1.9	1.3	10.3	100.0
Non Successful	1	3	6.2	1.2	9.3	31.1	2.3	11.6	1.4	1.0	16.8	100.0
% Successful	36.1	31.8	39.7	32.2	37.3	41.8	49.0	43.1	48.5	44.9	29.4	40.4

GED

Total Entrants	20	15	4.1	1.7	6.5	42.2	4.7	13.7	1.7	2.6	1.6	100.0
Successful	21	21	3.4	1.4	6.3	42.9	5.4	13.5	1.6	2.3	1.5	100.0
Non Successful	19	15	4.9	1.9	6.7	41.4	4.0	13.9	1.9	2.9	1.6	100.0
% Successful	55.3	62.0	44.9	47.0	51.5	54.5	61.2	52.9	49.3	47.5	53.2	53.6

High School Graduates^d

Total Entrants	20	27	5.1	1.5	6.9	31.6	4.2	11.6	1.4	3.8	13.8	100.0
Successful	21	22	4.7	1.7	6.1	32.8	5.3	12.4	1.5	3.8	11.5	100.0
Non Successful	19	34	5.6	1.3	7.8	29.7	2.5	10.3	1.3	3.7	17.5	100.0
% Successful	64.7	52.2	54.1	69.2	57.6	63.4	77.8	66.7	66.7	62.5	52.1	62.4

TOTAL

Total Entrants	10	13	5.5	1.2	8.8	33.3	3.3	12.5	1.6	1.5	11.3	100.0
Successful	11	13	5.2	1.0	8.0	34.6	4.0	13.1	1.7	1.6	8.1	100.0
Non Successful	10	11	5.7	1.3	9.4	32.2	2.8	12.0	1.4	1.4	13.9	100.0
% Successful	46.7	42.1	41.7	39.3	40.1	45.7	52.9	46.0	48.6	47.5	31.5	44.0

^a Between 1 July 1977 and 30 June 1976

^b Includes draftsman, commercial graphic artist, cosmetologist and engineering aide/rodman - chairman

^c Includes laundry worker, custodial maintenance, security guard/policeman and a miscellaneous category.

^d A small category - 351 and cases - almost all categories contain less than 100 cases

TABLE 47. CHARACTERISTICS OF JOB CORPS TRAINEES ENTERING
MILITARY SERVICE^a WHO SUCCESSFULLY COMPLETED
FIRST THREE YEARS OF ACTIVE DUTY - BY PLACEMENT
STATUS AFTER LEAVING JOB CORPS, AND BY EDUCA-
TIONAL LEVEL

<u>NON-HIGH SCHOOL GRADUATES</u>				
	<u>JOB</u>	<u>ARMED FORCES</u>	<u>SCHOOL</u>	<u>TOTAL</u>
<u>TOTAL ENTRANTS</u>	59.2	24.9	15.9	100.0
SUCCESSFUL	58.0	27.3	14.7	100.0
NON-SUCCESSFUL	60.1	23.2	16.7	100.0
% SUCCESSFUL	40.3	45.1	38.1	41.1
<u>GED</u>				
<u>TOTAL ENTRANTS</u>	61.5	28.5	10.0	100.0
SUCCESSFUL	61.3	29.2	9.5	100.0
NON-SUCCESSFUL	61.8	27.5	10.7	100.0
% SUCCESSFUL	54.3	56.0	51.5	54.5
<u>HIGH SCHOOL GRADUATES^b</u>				
<u>TOTAL ENTRANTS</u>	56.8	37.8	5.4	100.0
SUCCESSFUL	55.1	40.0	4.9	100.0
NON-SUCCESSFUL	59.7	34.0	6.3	100.0
% SUCCESSFUL	62.7	68.2	58.5	64.6
<u>TOTAL</u>				
<u>TOTAL ENTRANTS</u>	59.2	26.1	14.7	100.0
SUCCESSFUL	58.3	28.6	13.1	100.0
NON-SUCCESSFUL	59.9	24.0	16.1	100.0
% SUCCESSFUL	44.0	49.0	39.6	44.7

a. Between 1 July 1972 and 30 June 1976.

b. A small category - 756 valid cases - some categories contain less than 100 cases.

school graduates was 56.8%, and for non-high school graduates it was 59.2%. One might speculate that many of the people who followed the route: Job Corps to job to military service, found their jobs to be rather dissatisfying and they decided to enlist in the military. On the other hand, people who left the Job Corps training with a placement status of school tended not to migrate into the military. In the total group, only 14.7% of the trainees who entered the military had an initial post-Job Corps placement status of school. In the three educational credential groups, that percentage (Job Corps to school to service) varies from 15.9% for non-high school graduates, to 10.0% for GEDs, to 5.4% for high school graduates.

The data in Table 48 address the military success rate of Job Corps trainees by educational attainment level and by census region from which the trainees came. (Appendix E gives the states in each of the census regions.)

Overall, the South-Atlantic census region contributed 22.0% of the Job Corps trainees who entered the military. This percentage is considerably higher than that of the 16.2% for the West-South Central region, which produced the second greatest number of Job Corps trainees entering the military. The New England area had the lowest percentage of trainees among those entering the military.

There is no pronounced pattern of best and worst among the census regions on the measure "percentage successful in the military".

Table 49 presents data about the sizes of the home towns of Job Corps trainees who were successful in the military. Overall, the greatest percentage (34.9%) of Job Corps trainees successful in the military came from cities of over 250,000 population. However, it can be seen that 35.4% of the Job Corps trainees entering the military came from cities of over

TABLE 48.

CHARACTERISTICS OF JOE CORPS TRAINEES ENTERING MILITARY SERVICE •
WHO SUCCESSFULLY COMPLETED FIRST THREE YEARS OF ACTIVE DUTY
-CENSUS REGION-

Non-High School Graduates

	New England	Middle Atlantic	East-North Central	West-North Central	South Atlantic	East-South Central	West-South Central	Mountain	Pacific	Other	Total
Total Entrants	1.1	12.3	9.0	8.8	22.8	11.4	17.2	4.4	12.3	.7	100.0
Successful	.8	11.8	7.9	7.3	24.4	11.6	17.8	1.7	12.5	.9	100.0
Non Successful	1.3	12.6	9.7	9.7	21.8	11.3	16.8	4.3	12.0	.3	100.0
% Successful	28.1	37.8	34.6	32.9	42.2	40.1	40.9	41.6	41.1	52.4	39.5

GED

Total Entrants	.7	12.7	9.4	10.9	21.7	8.2	17.4	5.4	12.6	1.0	100.0
Successful	.8	11.8	8.6	9.4	33.0	8.3	18.5	5.8	12.6	1.2	100.0
Non Successful	.7	13.7	10.4	12.7	20.1	8.0	16.1	4.9	12.6	.8	100.0
% Successful	56.7	49.9	49.1	46.2	57.0	54.7	57.1	57.9	53.8	62.5	53.7

High School Graduates^b

Total Entrants	.6	7.4	8.1	6.8	19.1	10.5	21.1	3.6	21.9	.9	100.0
Successful	.7	7.2	6.0	5.9	20.6	11.7	23.3	3.5	19.8	1.3	100.0
Non Successful	.5	7.7	11.4	8.2	16.7	8.5	17.8	3.7	25.2	.3	100.0
% Successful	66.7	59.7	45.6	53.0	66.1	68.6	67.5	60.0	55.4	88.9	61.3

TOTAL

Total Entrants	1.0	13.3	11.9	8.5	22.0	10.1	16.2	4.3	11.9	.8	100.0
Successful	.8	12.7	10.2	7.3	23.4	10.3	17.2	4.6	12.4	1.1	100.0
Non Successful	1.2	13.7	13.1	9.4	20.9	10.0	15.5	4.0	11.6	.6	100.0
% Successful	32.5	40.7	36.6	36.4	45.4	43.4	45.1	45.9	44.2	58.1	42.6

^a Between 1 July 72 and 30 June 76^b A small category of 974 cases - many categories contain less than 100 cases

TABLE 49. CHARACTERISTICS OF JOB CORPS TRAINEES ENTERING
MILITARY SERVICE^a WHO SUCCESSFULLY COMPLETED
FIRST THREE YEARS OF ACTIVE DUTY - SIZE OF
ENROLLEE'S HOME TOWN -

<u>NON-HIGH SCHOOL GRADUATES</u>					
	<u>UNDER 2,500</u>	<u>2,500 to 50,000</u>	<u>50,000 to 250,000</u>	<u>OVER 250,000</u>	<u>TOTAL</u>
<u>TOTAL ENTRANTS</u>	15.2	32.7	19.2	32.9	100.0
<u>SUCCESSFUL</u>	15.7	32.1	19.1	33.1	100.0
<u>NON-SUCCESSFUL</u>	15.0	33.0	19.3	32.7	100.0
<u>% SUCCESSFUL</u>	40.5	38.7	39.0	39.6	39.3
<u>GED</u>					
<u>TOTAL ENTRANTS</u>	12.5	31.6	18.5	37.4	100.0
<u>SUCCESSFUL</u>	13.0	32.2	17.7	37.1	100.0
<u>NON-SUCCESSFUL</u>	11.7	31.0	19.4	37.9	100.0
<u>% SUCCESSFUL</u>	56.7	55.0	51.7	53.5	54.0
<u>HIGH SCHOOL GRADUATES^b</u>					
<u>TOTAL ENTRANTS</u>	17.5	32.0	22.9	27.6	100.0
<u>SUCCESSFUL</u>	19.4	31.4	24.1	25.1	100.0
<u>NON-SUCCESSFUL</u>	14.6	33.0	21.0	31.4	100.0
<u>% SUCCESSFUL</u>	67.4	59.7	64.2	55.4	60.9
<u>TOTAL</u>					
<u>TOTAL ENTRANTS</u>	14.3	31.2	19.1	35.4	100.0
<u>SUCCESSFUL</u>	15.0	31.1	19.0	34.9	100.0
<u>NON-SUCCESSFUL</u>	13.8	31.3	19.1	35.8	100.0
<u>% SUCCESSFUL</u>	44.6	42.4	42.4	41.9	42.5

a. Between 1 July 1972 and 30 June 1976.

b. A small category - only 1000 valid cases.

250,000 population. Thus, the percentage of Job Corps trainees from cities of over 250,000 population who were successful in the military was slightly less than the percentage one would have expected.

Overall, and in each of the three educational attainment groups, Job Corps trainees from towns of under 2,500 population had the highest rates of success in the military.

The automatic interaction detector (AID3) computer program and multiple regression were used in efforts to build a model predictive of success/nonsuccess in the military of those Job Corps trainees who entered the services. Sample sizes used when the AID3 program was applied to the data were primarily dictated by computer time requirements. As mentioned in the last chapter, AID3 runs with sample sizes of 16,000 cases tended to consume about one hour of wall clock, and four minutes of CPU time.

To run AID3 on the data of the 47,522 non-prior service males who entered the military after having been Job Corps trainees, the records of individuals were randomly selected. Table 50 shows the results of an AID3 analysis, based on 7,706 cases (approximately one of every six records).

The group success rates revealed by AID3, and shown in Table 50, can be compared with the total non-prior service male success rates given in Table 12. Table 12 shows the following percentages of success: high school graduates, 74.9%; GEDs, 51.1%; and non-high school graduates, 50.5%. For the military, the most important finding from comparing Tables 12 and 50 is that for each of the three educational accomplishments groups, individuals who had either completed their Job Corps training or exhausted their maximum benefits enjoyed a greater probability of success in the military than did people from the same educational attainment groups who had not been in the Job Corps. Of course, the data in Table 50 also reveal

TABLE 50. RATES OF ENTRANCE AND SUCCESS IN THE MILITARY
- RESULTS OF AN AID3 ANALYSIS -

<u>GROUP</u>	<u>% OF GROUP ENTERING MILITARY</u>	<u>OF THOSE IN GROUP ENTERING MILITARY, % WHO WERE SUCCESSFUL</u>
Completed Job Corps or Exhausted Maximum Job Corp Benefits:		
o High School Graduate	19.1	76.7
o GED	31.7	60.6
o Non-High School Graduate	20.2	57.3
Didn't Complete Job Corps Training:		
o High School Graduate	21.0	55.9
o GED	37.6	54.0
o Non-High School Graduate	17.5	40.7

that people who complete the Job Corps or exhaust their benefits are better bets (in terms of finishing three years of service) for the military than are people who do not complete their Job Corps training.

From Table 12, one would expect a high school graduate to have a probability of service success of nearly .75; but from Table 50 one learns that if the individual is a high school graduate who did not finish the Job Corps, his probability of success in the service is about .56 - a substantial reduction. A similar drop in percentage of success can be seen for non-high school graduates. GEDs, however, had a higher probability of success even if they were Job Corps noncompleters than if they were the typical non-prior service male GED entering the military.

Table 51 presents the results of an AID3 analysis using only age, mental group, and high school graduate/not a high school graduate (including GEDs), and Job Corps completion/non-completion as predictors. In this analysis, Job Corps completion includes both those who completed the Job Corps and these who exhausted their maximum benefits. These predictors were chosen because they are the ones most likely to be accepted for use by the military in the enlistment screening process. The records of 15,464 individuals were used to form Table 51.

As can be seen by examining the data in Table 51, the impact of Job Corps completion on military success rate depended upon an individual's: mental group, high school graduation status, and age (≤ 18 or > 18) at enlistment. In reviewing the military success percentages in Table 51, the reader should keep in mind the comparable success rates shown in Table 12 for non-prior service males in general: high school graduates, 74.9%; GEDs, 51.1%; and non-high school graduates, 50.5%. The reader should also

TABLE 51. PERCENT SUCCESSFUL IN THE FIRST THREE YEARS OF THE SERVICE:
JOB CORPS COMPLETION AND MILITARY SCREENING VARIABLES AS
PREDICTORS

	JOB CORPS COMPLETION	AGE AT ENLISTMENT				
		≤ 18		> 18		
		NON- HIGH SCHOOL GRADUATES	HIGH SCHOOL GRADUATES	NON- HIGH SCHOOL GRADUATES	HIGH SCHOOL GRADUATES	
MENTAL GROUP	I	Completed Did Not Complete	33.3 32.4	45.5 50.0	78.0 59.4	93.8 74.0
	II	Completed Did Not Complete	38.8 37.3	52.5 45.1	46.0 41.3	67.8 54.4
	III	Completed Did Not Complete	51.3 35.6	48.5 40.4	61.4 44.4	66.4 58.1
	IV	Completed Did Not Complete	56.9 36.4	54.9 41.6	61.0 47.3	68.0 55.7

NOTE 1: Job Corps completion encompasses individuals who either finished the Job Corps or exhausted their Job Corps benefits.

NOTE 2: GED holders were combined with non-high school graduates because the Navy did not differentiate GEDs from non-high school graduates on the cohort file prior to 1976.

NOTE 3: This analysis accounted for 4.8% of the variance in the criterion.

recall that, as shown in Table 32, approximately 90% of the Job Corps entrants to the military scored in mental groups three and four.

A number of multiple regression runs were made using Job Corps data only, and Job Corps plus military selection screening data, in efforts to predict success/nonsuccess in the military. Dummy and interactive predictors were used in some of these analyses. None of the regressions produced an equation with a particularly high multiple correlation coefficient, and the more complicated equations remorselessly washed out when cross validated on hold-out samples.

As the former Job Corps trainees entering the military were quite homogeneous with regard to mental group (90% were in mental groups three and four), future prediction efforts might concentrate more on the available educational attainment data as predictors. Instead of using the three educational attainment categories as predictors of success in the military, as was done in this part of this study, any future work might use the following Job Corps educational categories as predictors: passed GED, failed GED, GED incomplete, ineligible for GED, and eligible but not enrolled in GED training. Unfortunately, data on the Job Corps file do not allow one to separate high school graduates from individuals scoring too low to pursue the GED - two very different groups lumped together in the ineligible for GED group. For this research, Job Corps data on highest year of education completed were used with GED status (ineligible for GED) to attempt to identify high school graduates.

CHAPTER SUMMARY

This chapter examined the military success rates of former Job Corps trainees who entered the military. Success was defined as being on active duty at the end of three years, or having completed an enlistment with an honorable discharge, or having entered an officer program. The records of 47,522 non-prior military service males who were former Job Corps trainees were used in the analyses. Educational attainment level data (non-high school graduate, GED, and high school graduate), and other information were used in analyzing rates of success for Job Corps trainees who entered the military. The data came from individuals who had been Job Corps trainees during the period 1970-1973, and who had entered the military during fiscal years 1971-1979.

The educational attainment data used in this chapter were from the data files of the Job Corps, and reflect level of education at termination of Job Corps training. Using these educational data with the services' data files revealed that Job Corps trainees who were high school graduates and who entered the military had the highest success rate (60.8%) in the military; GED holders had the next highest rate (53.6%), and non-high school graduates the lowest rate (39.3%). The military success rates for former Job Corps trainees who were high school graduates and those who were non-high school graduates were lower than for the same groups among non-prior service male enlistees in general. On the other hand, GEDs entering the military after Job Corps training had a slightly higher success rate in the military than did non-prior service male GEDs in general (53.6% vs. 51.1%).

The percentages of former Job Corps trainees successful in the military showed a surprising amount of variation among the years for which data

were available. This variation was true for the total group and for each of the three separate educational attainment groups. For the total group, the percentage successful in the military ranged from 39.5% for 1973 entrants to the Job Corps, to 57.7% for 1969 entrants to the Job Corps. The comparable percentages for GED holders ranged from 50.4% for 1973 Job Corps entrants to 63.6% for 1969 entrants.

Several Job Corps discharge codes tended to be associated with lower (than for other discharge codes) service success rates: medical, resigned, AWOL, and disciplinary discharge. A Job Corps discharge code associated with higher success rates was "completion". Compared to service success rates for non-prior service males in general, former Job Corps trainees who were non-high school graduates and who had completed the Job Corps had a higher success rate. GEDs who completed, or were administratively discharged, or who had their parental consent withdrawn, had higher success rates. Only for withdrawal of parental consent did former Job Corps trainees who were high school graduates have a higher success rate than did non-prior service male high school graduate accessions in general.

Overall, individuals who were 19 years old when they entered the Job Corps had the highest (among the several age groups) service success rate (49.6%). The age with the highest success rate varied among the three educational attainment levels. GED holders who were 20 years old when they entered the Job Corps had the highest (of the several age groups) rate of success in the service (70.3%).

Asian-Americans comprised less than 1% of the former Job Corps trainees who entered the military, but they had the highest (relative to other ethnic groups) service success rate overall, and in each of the educational

categories. Former Job Corps trainees who had GEDs and entered the military who were black, or Spanish-, or Asian-Americans had success rates exceeding that of GED non-prior service males in general. Former Job Corps trainees who were white and who entered the military had lower service success rates than did any of the other ethnic groups overall, and in each of the educational categories.

The relationship between performance on a Job Corps reading test and performance (success) in the military was surprising, because there was apparently little or no relationship between reading grade level and success in the military.

Individuals who had stayed in the Job Corps more than 360 days had higher service success rates than did people who stayed in the Job Corps fewer days. This was true overall, and for each of the three educational attainment groups.

There were substantial differences among the service success rates of trainees who had received training in the different Job Corps occupational areas. Overall, among the occupations, the highest percentage service success rate was 52.9% for individuals trained in electrical repair occupations. The lowest overall success rate was 39.3% for those trained in forestry and farming. GED holders trained in clerical and sales, or in electrical repair had the highest service success rate (62.0% and 61.2%, respectively) among Job Corps trainees in that educational attainment group.

Individuals whose actual placement status upon leaving the Job Corps was to the armed forces had higher service success rates than those who left the Job Corps and were recorded as placed either in jobs or in schools. This was true for

the total set of former Job Corps trainees entering the military and for each of the three educational groups.

Although there were differences among the percentages of success in the military of trainees from the different regions, the relationship between service success and census regions varied with educational attainment level. However, overall, and in each of the three educational attainment groups, Job Corps trainees from towns of under 2,500 population had the highest (among home town sizes) rates of success in the military.

Statistical analyses showed that individuals who had completed the Job Corps, or who had exhausted their Job Corps benefits, had higher service success rates than those who had not completed the Job Corps, but the amount by which the success rates increased also depended simultaneously upon other factors. For instance, Job Corps completers who were over 18 years of age when they enlisted, who were high school graduates, and who scored in mental group I, had a particularly high (93.8%) success rate in the military. Particularly low military success rates (as low as 32.4%) were observed for non-high school graduates who did not complete the Job Corps, and who were less than 18 years of age when they enlisted.

CHAPTER V

SUMMARY

Perspective

As mentioned in the introductory chapter of this report, this study used historical data from data files maintained by the military services. Intertwined with the data are the influences of military, social, and economic conditions and policies in effect during the time period the data were accumulated. It was not the intent to determine the superiority of some particular type of educational background or educational certificate. In fact, the type of data used in this study can only be used to suggest, rather than to prove, relationships among educational and military performance measures. Results in this report which suggest the superiority of high school diploma graduates in terms of military performance, may, for instance, be partially, or even totally, due to assignment policies within the military services which provide differential treatment to people with different educational backgrounds.

Summary

The material presented here will be organized as responses to questions asked in the original study plan for this research project. References to pertinent tables in the report are given where useful.

- o What are the characteristics of individuals entering military service with GED certificates compared with other accession groups?
 - o All data in the study were from males, so possible sex differences between GED holders and others were not studied.
 - o GEDs had mental group distributions similar to those of high school graduates, and higher than those of the non-high school graduates. On a percentage basis, fewer GEDs have scored in mental group IV than have high school graduates. This probably reflects a policy by the services to exclude lower mental group GED holders. (Tables 3 and 4)
 - o The percentage of blacks among GEDs who enlist is less than the percentage of blacks among enlistees in general. (Table 5)

- o In recent years, the typical GED, non-high school graduate, or high school graduate who enlisted has been 18 years old. Data seem to indicate, however, that the services have shifted away from recruiting 17 year old GEDs or non-high school graduates. (Tables 6a-6d)
- o Average ASVAB subtest scores for GED holders and high school graduates exceed those of non-high school graduates. The average scores of the high school graduates are greater than those of GEDs on academically oriented subjects, but the average scores of GED holders are greater than those of high school graduates on vocationally oriented subtests. (Table 7)
- o The South has provided the greatest percentage of non-prior service male accessions overall, and for each of the three educational groups. (Tables 8a-8c, and Table 9)
- o Among former Job Corps trainees entering the military, GED holders were much more likely to have completed their Job Corps training than were non-high school graduates or high school graduates. (Table 24)
- o Former Job Corps trainees who entered the military and who were GEDs or non-high school graduates were, on average, younger when they entered the Job Corps than were high school graduates. (Table 25)

- o Among former Job Corps trainees who were GEDs, blacks were more likely to enter the military than were whites or members of other ethnic groups. (Table 27)
- o Of the GED certificate holders who joined the military after leaving the Job Corps, 61.2% had an initial placement in a job. This exceeded the percentages of non-high school graduates or high school graduates who were placed in a job, but eventually entered the military. (Table 30)
- o GED holders who joined the military after leaving the Job Corps had higher, on average, reading scores than did the high school graduates or non-high school graduates who joined the military after leaving the Job Corps. (Table 31)
- o The most frequently pursued training while in the Job Corps was in construction occupations. This was true for service entrants from each of the three educational attainment levels. (Table 33)
- o GED holders who entered the military after having been in the Job Corps had stayed longer, on average, in the Job Corps than had non-high school graduates or high school graduates. (Table 34)
- o For each of the three educational attainment groups, the South Atlantic and the West-South Central census regions

provided the largest percentages of former Job Corps trainees who entered the military. (Table 35)

- o How well do GED-holders perform and behave in service compared with other recruits, in general, and after holding other factors constant?
- o GED holders and high school graduates were more often assigned to electrical/mechanical occupations than to any other occupation. The modal assignment for non-high school graduates was to combat-oriented occupations. (Table 10)
- o On average, high school graduates fared better in terms of paygrade than did GED holders. GEDs, in turn, attained, on average, a higher paygrade than did non-high school graduates. In terms of paygrade attainment, GEDs came nearer to the paygrade attainment of high school graduates in the Army and the Air Force than they did in the Navy or the Marine Corps. (Table 11)
- o About 50% of an entering group of GEDs attrite from the service by the end of three years of active duty. The attrition rates for GEDs and non-high school graduates were similar, except for in the Navy where GEDs had an attrition rate about 7% less than that of non-high school graduates. High school graduates had an attrition rate about one-half that of GEDs or non-high school graduates. (Table 12)

- o Statistically controlling for mental group does not eliminate the differences between the attrition rates of high school graduates and GEDs or non-high school graduates; high school graduates continue to have about one-half the attrition rate of GEDs or non-high school graduates. When equated on mental group, GEDs and non-high school graduates had about the same attrition rates, except in the Navy where GEDs had a lower attrition rate than did non-high school graduates. (Table 13)
- o Does the performance of GED-holders in service vary based upon such factors as education level, age, sex, aptitude, race, the state awarding the certificate, etc?
- o All data in the study were from males, so sex was not a variable analyzed in this report. Information was not available about the states in which the GED certificates were awarded.
- o Statistically controlling for race (black/non-black) does not eliminate the differences among the attrition rates of the three educational attainment categories. Black vs. white attrition differences were usually minimal, but high school graduates had about one-half the three year attrition rate of either high school graduates or GEDs. (Table 14)

- o When four-year retention is defined as the percentage of a group enlisting in the military who are still on active duty beyond the first four years of active duty, high school graduates have a greater four-year retention rate than do GEDs. In turn, GEDs have a higher four-year retention rate than do non-high school graduates. (Table 15)
- o Given a group has finished four years in the service, a greater percentage of GEDs continue in the service than is the case for either high school graduates or non-high school graduates. Black GEDs who have completed four years of service have a higher service continuation rate than do non-black GEDs. (Table 16)
- o Statistical analyses of Navy data showed that GEDs had a higher attrition rate than high school graduates, but lower attrition than did non-high school graduates, even after years of education, race (white/non-white), marital status, AFQT score, and age at enlistment were considered. However, GED vs. non-high school graduation attrition differences disappeared after Navy assignments, e.g., air squadron, ship, etc., were considered. (Tables 17 and 18)
- o Statistical analyses of Army data also revealed that GEDs had a higher attrition rate than did high school graduates, but lower attrition than did non-high school graduates, even after mental group, race, and age at enlistment were considered. (Table 19)

- o Do individuals who attain a GED certificate through the Job Corps program perform any more effectively in military service than other GED-holders?

- o For non-prior service males who entered the service other than via the Job Corps, GED holders had a military success rate of 51.1%. Individuals who completed the Job Corps and had a GED when they left the Job Corps had a military success rate of 76.7%. Even individuals who did not complete the Job Corps, but who had their GED when they left the Job Corps, had a military success rate of 54% -- approximately 3% greater than that for GED non-prior service males in general. Therefore, the answer to the question posed above is "yes". (Table 50)

- o What is the relationship between reading level and other achievement indices for Job Corps trainees and successful military performance?

- o In all three educational attainment groups, individuals who completed the Job Corps or who had an administrative discharge had higher service success rates than did the other discharge groups. Lower service success rates tended to be associated with the following reasons for discharge: medical, resigned, AWOL, and disciplinary discharge. (Table 41)

- o Reading scores on the Job Corps file had no strong relationship with success in the military. (Table 41)
- o Overall, individuals who had completed their GEDs when they terminated their Job Corps training had a service success rate of 53.8%. Individuals who were still non-high school graduates when they terminated their Job Corps training had a service success rate of 39.6%. (Table 44)
- o Overall, and for each of the three educational accomplishment groups, individuals who took a greater number of days of Job Corps training had a higher rate of success in the military than those with fewer days of training. (Table 45)
- o Statistical analyses revealed that success of Job Corps trainees in the military could be viewed as being jointly related to: mental group, age at enlistment, Job Corps completion, and educational attainment (high school graduate vs. not a high school graduate). The highest success rate for Job Corps entrants to the military was for high school graduates who were over 18 when they enlisted, who scored in Mental Group I on the Armed Services Vocational Aptitude Battery, and who had completed the Job Corps. (Table 51)

LIST OF REFERENCES

1. Aiken, E. G., Duffy, T. M., and Nugent, W. A.; Reading Skill and Performance in a Sample of Navy Class "A" Schools; Navy Personnel Research and Development Center, San Diego, California, April 1977.
2. Cooper, R. V. L., Military Manpower and the All-Volunteer Force; Santa Monica, California, RAND, 1977.
3. Smith, J. V., Jr., and Kendall, W. A.; Personal, Situational, and Organizational Determinants of Navy Enlisted Attrition; Masters thesis, Nava Postgraduate School, Monterey, California, June 1980.
4. Sonquist, J. A., Baker, E. L., and Morgan, J. N., Searching for Structure; Institute for Social Research, University of Michigan, Ann Arbor, Michigan 1973.
5. Sticht, T. G. ed., Reading for Working: A Functional Literacy Anthology; Human Resources Research Organization, Alexandria, Virginia, 1975.

APPENDIX A

MEAN AFQT SCORES FOR FY77
NPS MALE ACCESSIONS, BY SEPARATE BRANCH OF SERVICE

TRENDS IN ARMED FORCES QUALIFICATION TEST (AFQT) SCORES FOR
NON-PRIOR SERVICE MALE ACCESSIONS BY FISCAL YEAR OF ENTRY,
EDUCATIONAL LEVEL, AND SERVICE - PERCENTAGE DISTRIBUTIONS
FOR ARMY -

AFQT CATEGORY	NHS						
	FISCAL YEAR OF ENTRY						
	1973	1974	1975	1976	1977	1978	1979
I and II	18	15	14	19	10	12	09
III A	23	24	28	23	21	31	22
III B	39	39	47	57	67	53	68
IV	20	22	11	01	02	04	01
TOTAL	100	100	100	100	100	100	100

AFQT CATEGORY	GED						
	FISCAL YEAR OF ENTRY						
	1973	1974	1975	1976	1977	1978	1979
I and II	35	28	30	31	23	24	17
III A	26	25	27	22	23	29	26
III B	26	32	34	29	37	45	56
IV	13	15	09	18	17	02	01
TOTAL	100	100	100	100	100	100	100

AFQT CATEGORY	HS						
	FISCAL YEAR OF ENTRY						
	1973	1974	1975	1976	1977	1978	1979
I and II	39	34	37	36	27	22	21
III A	22	22	23	21	20	20	20
III B	24	27	29	31	38	41	41
IV	15	17	11	12	15	17	18
TOTAL	100	100	100	100	100	100	100

AFQT CATEGORY	TOTAL						
	FISCAL YEAR OF ENTRY						
	1973	1974	1975	1976	1977	1978	1979
I and II	30	25	28	29	20	20	16
III A	23	23	25	21	20	23	21
III B	31	33	36	41	49	44	52
IV	16	19	11	09	11	13	11
TOTAL	100	100	100	100	100	100	100

TRENDS IN ARMED FORCES QUALIFICATION TEST (AFQT) SCORES FOR
NON-PRIOR SERVICE MALE ACCESSIONS BY FISCAL YEAR OF ENTRY,
EDUCATIONAL LEVEL, AND SERVICE - PERCENTAGE DISTRIBUTIONS
FOR NAVY -

AFQT CATEGORY	NHS						
	FISCAL YEAR OF ENTRY						
	1973	1974	1975	1976	1977	1978	1979
I and II	15	15	16	31	23	27	26
III A	22	27	29	34	38	48	50
III B	36	57	54	33	38	24	23
IV	27	01	01	02	01	01	01
TOTAL	100	100	100	100	100	100	100

AFQT CATEGORY	GEO						
	FISCAL YEAR OF ENTRY						
	1973	1974	1975	1976	1977	1978	1979
I and II	0	0	0	42	41	48	47
III A	0	0	0	23	30	36	39
III B	0	0	0	34	28	15	13
IV	0	0	0	01	01	01	01
TOTAL	0	0	0	100	100	100	100

AFQT CATEGORY	HS						
	FISCAL YEAR OF ENTRY						
	1973	1974	1975	1976	1977	1978	1979
I and II	39	47	46	48	46	44	40
III A	22	24	26	25	24	27	27
III B	24	24	21	21	26	26	28
IV	15	05	07	06	04	03	05
TOTAL	100	100	100	100	100	100	100

AFQT CATEGORY	TOTAL						
	FISCAL YEAR OF ENTRY						
	1973	1974	1975	1976	1977	1978	1979
I and II	30	36	38	44	41	41	38
III A	23	25	27	27	28	32	32
III B	31	35	30	24	29	25	27
IV	16	04	05	05	02	02	03
TOTAL	100	100	100	100	100	100	100

TRENDS FOR ARMED FORCES QUALIFICATION TEST (AFQT) SCORES FOR
NON-PRIOR SERVICE MALE ACCESSIONS BY FISCAL YEAR OF ENTRY,
EDUCATIONAL LEVEL, AND SERVICE - PERCENTAGE DISTRIBUTIONS
FOR MARINE CORPS -

AFQT CATEGORY	NHS						
	FISCAL YEAR OF ENTRY						
	1973	1974	1975	1976	1977	1978	1979
I and II	19	29	30	33	18	19	18
III A	24	33	32	34	36	35	38
III B	43	31	33	30	44	44	42
IV	14	07	05	03	02	02	02
TOTAL	100	100	100	100	100	100	100

AFQT CATEGORY	GED						
	FISCAL YEAR OF ENTRY						
	1973	1974	1975	1976	1977	1978	1979
I and II	29	32	31	50	36	33	27
III A	19	31	26	30	36	37	40
III B	32	29	34	18	27	28	31
IV	20	08	09	02	01	02	02
TOTAL	100	100	100	100	100	100	100

AFQT CATEGORY	HS						
	FISCAL YEAR OF ENTRY						
	1973	1974	1975	1976	1977	1978	1979
I and II	33	38	40	42	34	28	26
III A	22	26	28	27	26	27	27
III B	28	28	26	27	34	38	41
IV	17	08	06	04	06	07	06
TOTAL	100	100	100	100	100	100	100

AFQT CATEGORY	TOTAL						
	FISCAL YEAR OF ENTRY						
	1973	1974	1975	1976	1977	1978	1979
I and II	25	33	35	39	30	26	24
III A	23	30	30	30	29	30	31
III B	36	29	30	28	37	40	41
IV	16	08	05	03	04	04	04
TOTAL	100	100	100	100	100	100	100

TRENDS IN ARMED FORCES QUALIFICATION TEST (AFQT) SCORES FOR
NON-PRIOR SERVICE MALE ACCESSIONS BY FISCAL YEAR OF ENTRY,
EDUCATIONAL LEVEL, AND SERVICE - PERCENTAGE DISTRIBUTIONS
FOR AIR FORCE

AFQT CATEGORY	NHS						
	FISCAL YEAR OF ENTRY						
	1973	1974	1975	1976	1977	1978	1979
I and II	43	95	71	79	86	73	71
III A	24	02	15	12	09	18	18
III B	32	02	13	08	04	08	10
IV	01	01	01	01	01	01	01
TOTAL	100	100	100	100	100	100	100

AFQT CATEGORY	GED						
	FISCAL YEAR OF ENTRY						
	1973	1974	1975	1976	1977	1978	1979
I and II	23	13	18	30	33	21	20
III A	35	35	45	43	45	53	54
III B	36	51	36	26	21	24	25
IV	06	01	01	01	01	01	01
TOTAL	100	100	100	100	100	100	100

AFQT CATEGORY	HS						
	FISCAL YEAR OF ENTRY						
	1973	1974	1975	1976	1977	1978	1979
I and II	45	42	43	51	52	46	40
III A	25	27	31	30	31	36	35
III B	26	30	25	18	16	17	24
IV	04	01	01	01	01	01	01
TOTAL	100	100	100	100	100	100	100

AFQT CATEGORY	TOTAL						
	FISCAL YEAR OF ENTRY						
	1973	1974	1975	1976	1977	1978	1979
I and II	44	43	44	51	53	46	41
III A	25	26	30	29	31	36	35
III B	27	30	25	19	15	17	23
IV	04	01	01	01	01	01	01
TOTAL	100	100	100	100	100	100	100

APPENDIX B

RACIAL TRENDS FOR NPS ACCESSIONS
BY FISCAL YEAR OF ENTRY AND EDUCATIONAL
LEVEL, BY SEPARATE BRANCH OF SERVICE

RACIAL TRENDS FOR NON-PRIOR SERVICE MALE ACCESSIONS
BY FISCAL YEAR OF ENTRY, EDUCATIONAL LEVEL, AND
SERVICE - PERCENTAGE DISTRIBUTIONS FOR ARMY -

NHS

FISCAL YEAR OF ENTRY

<u>RACE</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
BLACK	22	21	23	21	25	28	32
OTHER	78	79	77	79	75	72	68
TOTAL	100	100	100	100	100	100	100

GED

FISCAL YEAR OF ENTRY

<u>RACE</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
BLACK	81	18	14	20	23	21	23
OTHER	19	82	86	80	77	79	77
TOTAL	100	100	100	100	100	100	100

HS

FISCAL YEAR OF ENTRY

<u>RACE</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
BLACK	20	28	25	28	34	38	40
OTHER	80	72	75	72	66	62	60
TOTAL	100	100	100	100	100	100	100

TOTAL

FISCAL YEAR OF ENTRY

<u>RACE</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
BLACK	21	28	23	25	30	35	36
OTHER	79	72	77	75	70	65	64
TOTAL	100	100	100	100	100	100	100

RACIAL TRENDS FOR NON-PRIOR SERVICE MALE ACCESSIONS
BY FISCAL YEAR OF ENTRY, EDUCATIONAL LEVEL, AND
SERVICE - PERCENTAGE DISTRIBUTIONS FOR NAVY^a -

RACE	NHS						
	FISCAL YEAR OF ENTRY						
	1973	1974	1975	1976	1977	1978	1979
BLACK	13	12	11	07	10	09	10
OTHER	87	88	89	93	90	91	90
TOTAL	100	100	100	100	100	100	100

RACE	GED						
	FISCAL YEAR OF ENTRY						
	1973	1974	1975	1976	1977	1978	1979
BLACK	0	0	0	04	10	07	08
OTHER	0	0	0	96	90	93	72
TOTAL	0	0	0	100	100	100	100

RACE	HS						
	FISCAL YEAR OF ENTRY						
	1973	1974	1975	1976	1977	1978	1979
BLACK	10	11	10	09	12	13	17
OTHER	90	89	90	91	88	87	83
TOTAL	100	100	100	100	100	100	100

RACE	TOTAL						
	FISCAL YEAR OF ENTRY						
	1973	1974	1975	1976	1977	1978	1979
BLACK	11	11	10	09	11	12	15
OTHER	89	89	90	91	89	88	85
TOTAL	100	100	100	100	100	100	100

- a. The Navy did not differentiate GEDs from other non-high school graduates until fiscal year 1976.

RACIAL TRENDS FOR NON-PRIOR SERVICE MALE ACCESSIONS
BY FISCAL YEAR OF ENTRY, EDUCATIONAL LEVEL, AND
SERVICE - PERCENTAGE DISTRIBUTIONS FOR MARINE CORPS -

<u>RACE</u>	<u>NHS</u> <u>FISCAL YEAR OF ENTRY</u>						
	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
BLACK	21	22	22	15	18	20	24
OTHER	79	78	78	85	82	80	76
TOTAL	100	100	100	100	100	100	100

<u>RACE</u>	<u>GED</u> <u>FISCAL YEAR OF ENTRY</u>						
	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
BLACK	21	15	21	11	13	14	16
OTHER	79	85	79	89	87	86	84
TOTAL	100	100	100	100	100	100	100

<u>RACE</u>	<u>HS</u> <u>FISCAL YEAR OF ENTRY</u>						
	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
BLACK	23	21	18	18	23	27	30
OTHER	77	79	82	82	77	73	70
TOTAL	100	100	100	100	100	100	100

<u>RACE</u>	<u>TOTAL</u> <u>FISCAL YEAR OF ENTRY</u>						
	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
BLACK	22	22	20	16	21	24	28
OTHER	78	78	80	84	79	76	72
TOTAL	100	100	100	100	100	100	100

RACIAL TRENDS FOR NON-PRIOR SERVICE MALE ACCESSIONS
BY FISCAL YEAR OF ENTRY, EDUCATIONAL LEVEL, AND
SERVICE - PERCENTAGE DISTRIBUTIONS FOR AIR FORCE -

	<u>NHS</u>						
	<u>FISCAL YEAR OF ENTRY</u>						
<u>RACE</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
BLACK	14	10	09	06	06	11	07
OTHER	86	90	91	94	94	88	93
TOTAL	100	100	100	100	100	100	100

	<u>GED</u>						
	<u>FISCAL YEAR OF ENTRY</u>						
<u>RACE</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
BLACK	11	13	11	09	07	09	10
OTHER	89	87	89	91	93	91	90
TOTAL	100	100	100	100	100	100	100

	<u>HS</u>						
	<u>FISCAL YEAR OF ENTRY</u>						
<u>RACE</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
BLACK	15	18	15	10	12	15	17
OTHER	85	82	85	90	88	85	83
TOTAL	100	100	100	100	100	100	100

	<u>TOTAL</u>						
	<u>FISCAL YEAR OF ENTRY</u>						
<u>RACE</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
BLACK	15	17	15	10	11	14	16
OTHER	85	83	85	90	89	86	84
TOTAL	100	100	100	100	100	100	100

APPENDIX C
DESCRIPTION OF JOB CORPS DATA FILE

JOB CORPS TAPE FOR DoD

<u>FIELD</u>	<u>CONTENTS</u>
1. SSN-1	Social Security Number or Temporary ID Number (9XX-XX-XXXX).
2. Last Name	First five characters of enrollee's last name.
3. Birth Date	Date of birth, YYMMDD.
4. Sex	1 = Male, 2 = Female.
5. Race	1 = Caucasian, 2 = Black, 3 = Asiatic, 0 = Other.
6. Ethnic Group	1 = Latin American, 2 = Caribbean, 3 = Pacific, 4 = Indian, 0 = Other.

Note: We combine Race/Ethnic Group as follows:

<u>Ethnic Group Code</u>	<u>and</u>	<u>Race Code</u>	<u>=</u>
1		any	"Spanish"
2		any	"Spanish"
3		3, 0, or bl.	"Oriental"
4		any	"Indian"
0 or blank		1	"White"
0 or blank		2	"Black"
0 or blank		3	"Oriental"
0 or blank		0 or blank	"Other" or "Oriental"

Sometimes it is convenient to categorize the groups as White, Black, Spanish, and Other.

7. Enrollee State	State of origin, prior to enrollment, Codes are 01-55.
8. Enrollee Zip Code	Zip code pertaining to enrollee's address pre-enrollment.
9. City Size	Size of enrollee's home town, grouped as follows:
	Under 2,500 = 1
	2,500-50,000 2
	50,000-250,000 3
	Over 250,000 4
10. High Grade Completed	The highest school grade completed by the enrollee. Range = 00-13.

11. Test-8-Score Score of enrollee's Job Corps Entry Reading Test. Range of scores = 00-25. See attached card for approximate grade level equivalents.
12. Type Discharge If code = 1-6, enrollee had military service prior to enrollment in Job Corps.
13. Arrival Date Date of enrollment in Job Corps, YYMMDD.
14. Term Date Date of termination from Job Corps, YYMMDD.
15. Term Center The ID number of the Job Corps center from which the enrollee terminated. Range = 009-999, with about 150 valid center numbers within that range.
16. Reason for Termination 3-letter codes: COM = Completion (graduation), CMX = Maximum Benefits Completion, RES = Resignation, AWD = AWOL Discharge, ADD = Administrative Discharge, APC = Admin. Discharge for Withdrawal of Parental Consent, DID = Disciplinary Discharge, RLD = Resignation in Lieu of Disciplinary Action, MED = Medical Discharge, DEA = Death.
17. GED GED status at time of termination: 1 = Passed GED, 2 = Failed GED Test, 3 = Incomplete, 4 = Ineligible for GED Program, and not enrolled, 5 = Eligible for GED Program but not enrolled.

Note: Code 4 (Ineligible) -- enrollee not enrolled in GED program because: a) did not score high enough to qualify for GED-level training; b) enrollee already had high school diploma or GED certificate.
18. LOS Days Length of stay in Job Corps, in days. (Interval between Arrival Date and Termination Date.) Range = 0 to 1,000.
19. Cluster 2-digit code describing the general type of vocational training the enrollee took. See attached table.
20. Sub-Cluster Single alphabetic code which, in conjunction with Cluster Code, describes specific vocational training taken by enrollee.
21. Placed By Enrollee's initial placement status after leaving Job Corps: 1 = Job, 2 = Armed Forces enlistment (or drafted), 3 = School or Other Training Program, including college, 4 = Other or Unknown.

WARNING: Any field may contain unexpected values. Best to range-check.

JOB CORPS CLUSTER CODES

- 01. SUB-PROFESSIONAL CLUSTER
 - A. Draftsman
 - B. Commercial/Graphic Artist
 - C. Cosmetologist
 - D. Engineering Aide/Rodman-Chairman
- 02. CLERICAL AND SALES CLUSTER
 - A. Clerk Typist
 - B. Office Machine Operator
 - C. Duplicating Machine Operator/Office Clerk
 - D. Key Punch Operator
 - E. Stock Clerk
 - F. Retail Sales Clerk
 - H. Secretary
 - K. Mail Clerk
 - X. Miscellaneous
- 03. SERVICE OCCUPATIONS CLUSTER
 - A. Laundry Worker Machine Presser
 - B. Custodial Maintenance
 - C. Security Guard/Policeman
 - X. Miscellaneous
- 04. FORESTRY, FARMING, AND GARDENING CLUSTER
 - A. Florist Assistant
 - B. Nursery Worker Landscape Assist Groundskeeper
 - C. Forestry and Conservation Workers
 - D. Farm Equipment Operator
 - X. Miscellaneous
- 05. FOOD SERVICE CLUSTER
 - A. Waiter or Waitress
 - B. Cook
 - C. Baker
 - D. Meat Cutter
 - X. Miscellaneous
- 06. AUTOMOTIVE AND MACHINERY REPAIR CLUSTER
 - A. Auto Mechanics Helper
 - B. Automobile Service Repairman (Mechanic)
 - C. Farm, Truck, Heavy Equipment Repairman
 - D. Small Gas Engine Repairman
 - E. Auto Body Repairman
 - F. Auto Parts Clerk
 - H. Service Station Attendant
 - K. General Machinery Repairman
 - M. Marine Engine Repairman
 - X. Miscellaneous

- 07. CONSTRUCTION TRADES CLUSTER
 - A. Carpenter Construction
 - B. Electrician
 - C. Cement Mason
 - D. Brick and Stone Mason
 - E. Painter-Paperhanger
 - F. Heavy Equipment Operator
 - H. Plumber
 - K. Construction Laborer
 - X. Miscellaneous
- 08. ELECTRICAL/APPLIANCE REPAIR CLUSTER
 - A. Air Conditioning/Refrigeration Mechanic
 - B. Air Conditioning Installer
 - C. Electrical Appliance Repairman
 - D. Radio and TV Repairman
 - E. Office Machine Repairman
 - F. Furnace Repairman
 - H. Gas Appliance Repairman
 - X. Miscellaneous
- 09. INDUSTRIAL PRODUCTION CLUSTER
 - A. Machine Operator/Machine Set-Up Man
 - B. Combination Welder (Production Line Welder)
 - C. Sheet Metal Worker
 - D. Furniture Upholsterer
 - E. Electronics Assembler
 - F. Offset Printer
 - H. General Printing Trade Worker
 - K. Factory Worker/Assembler - All Types
 - M. Cabinet Maker
 - X. Miscellaneous
- 10. TRANSPORTATION CLUSTER
 - A. Truck Driver, Heavy/Light
 - B. Warehouseman and Materials Handler
 - C. Forklift Operator
 - X. Miscellaneous
- 11. HEALTH OCCUPATIONS CLUSTER
 - A. Nurses Assistant
 - B. Dental Assistant
 - C. Licensed Practical Nurse
 - D. Veterinary Assistant
 - X. Miscellaneous
- 12. MISCELLANEOUS CLUSTER
 - X. MISCELLANEOUS

STATE LOOK-UP TABLE

<u>STATE NAME</u>	<u>STATE CODE</u>	<u>REGION CODE</u>
Alabama	01	04
Alaska	02	10
Arizona	03	09
Arkansas	04	06
California	05	09
Colorado	06	08
Connecticut	07	01
Delaware	08	03
District of Columbia	09	03
Florida	10	04
Georgia	11	04
Guam	12	09
Hawaii	13	09
Idaho	14	10
Illinois	15	05
Indiana	16	05
Iowa	17	07
Kansas	18	07
Kentucky	19	04
Louisiana	20	06
Maine	21	01
Maryland	22	03
Massachusetts	23	01

<u>STATE NAME</u>	<u>STATE CODE</u>	<u>REGION CODE</u>
Michigan	24	05
Minnesota	25	05
Mississippi	26	04
Missouri	27	07
Montana	28	08
Nebraska	29	07
Nevada	30	09
New Hampshire	31	01
New Jersey	32	02
New Mexico	33	06
New York	34	02
North Carolina	35	04
North Dakota	36	08
Ohio	37	05
Oklahoma	38	06
Oregon	39	10
Pennsylvania	40	03
Puerto Rico	41	02
Rhode Island	42	01
South Carolina	43	04
South Dakota	44	08
Tennessee	45	04
Texas	46	06
Utah	47	08

<u>STATE NAME</u>	<u>STATE CODE</u>	<u>REGION CODE</u>
Vermont	48	01
Virginia	49	03
Virgin Islands	50	02
Washington	51	10
West Virginia	52	03
Wisconsin	53	05
Wyoming	54	08
Foreign	55	09

FILE NAME: DMDC Cohort File

RECORD LENGTH: 155 x 6200

COL	DESCRIPTION	COL	DESCRIPTION	NOTES
1.		51.	TAFMS	1
2.		52.		
3.		53.		
4.		54.		
5.	SSAN	55.	DPOC	1
6.	Region	56.	DDOC	1
7.	CENSUS District	57.	HYEC	1
8.	First Three Digits	58.	PAYGRADE	1
9.	ZIP CODE	59.	SERVICE	1
10.	Last Two Digits	60.	MARITAL STATUS	1
11.	HOR STATE	61.	NUMBER OF DEPENDENTS	1
12.	HOR COUNTY (FIPS)	62.	SPN	1
13.	Y	63.		
14.	M DATE OF BIRTH	64.		
15.	D	65.		
16.	AGE AT ENTRY	66.	ISC	1
17.	RESERVED	67.	Y	1
18.	HYEC	68.	M DATE OF SEPARATION	
19.	SEX	69.	D	
20.	RACE	70.	Y	
21.	ETHNIC	71.	M BASD	1
22.	RACE ETHNIC	72.	D	
23.	MARITAL STATUS/DEPENDENTS	73.	Y ETS	
24.	TEST FORM	74.	M	
25.	AFQT PERCENTILE	75.	Y DOLE	1
26.	AFQT TEST GROUP	76.	M	
			CHARACTER OF SERVICE	1

COL	DESCRIPTION	COL	DESCRIPTION	NOTES
27.	12 APTITUDE AREA SCORES	77.	ELIGIBILITY TO REENLIST	1
28.		78.	Y	
29.		79.	M PEBD	
30.		80.	D	1
31.		81.	FILE FLAG	
32.		82.		1
33.		83.	TAFMS	
34.		84.		2
35.		85.	DPOC	
36.		86.		2
37.		87.	DDOC	
38.		88.		2
39.	SERVICE OF ACCESSION	89.	HYEC	2
40.	PRIOR SERVICE	90.	PAYGRADE	2
41.	Y DATE OF ENTRY	91.	SERVICE	2
42.	M	92.	MARITAL STATUS	2
43.	D	93.	NUMBER OF DEPENDENTS	2
44.	TERM OF ENLISTMENT	94.	SPN	
45.	ENTRY PAYGRADE	95.		
46.	AFES STATION	96.		2
47.	SPANISH NAME FLAG	97.	ISC	2
48.	HEIGHT	98.	Y	
49.	WEIGHT	99.	M DATE OF SEPARATION	
50.	MONTHS IN DEP	100.	D	2

APPENDIX D

DESCRIPTION OF THE
DEFENSE MANPOWER DATA CENTER'S
COHORT DATA FILE

FILE NAME: DMDC Cohort File
 RECORD LENGTH: 155 x 6200

COL	DESCRIPTION	COL	DESCRIPTION	NOTES
1.		51.	TAFMS	1
2.		52.		
3.		53.		
4.		54.		
5.	SSAN	55.	DPOC	1
6.	Region	56.	DDOC	1
7.	CENSUS District	57.	HYEC	1
8.	First Three Digits	58.	PAYGRADE	1
9.	ZIP CODE	59.	SERVICE	1
10.	Last Two Digits	60.	MARITAL STATUS	1
11.	HOR STATE	61.	NUMBER OF DEPENDENTS	1
12.	HOR COUNTY (FIPS)	62.	SPN	1
13.	Y	63.		
14.	M DATE OF BIRTH	64.		
15.	D	65.	ISC	1
16.	AGE AT ENTRY	66.	Y	1
17.	RESERVED	67.	M DATE OF SEPARATION	
18.	HYEC	68.	D	
19.	SEX	69.	Y	1
20.	RACE	70.	M BASD	
21.	ETHNIC	71.	D	
22.	RACE ETHNIC	72.	Y ETS	1
23.	MARITAL STATUS/DEPENDENTS	73.	M	
24.	TEST FORM	74.	Y DOLE	
25.	AFQT PERCENTILE	75.	M	1
26.	AFQT TEST GROUP	76.	CHARACTER OF SERVICE	1

COL	DESCRIPTION	COL	DESCRIPTION	NOTES
27.	12 AREA SCORES	77.	ELIGIBILITY TO REENLIST	1
28.		78.	Y	
29.		79.	M PEBD	
31.		81.	FILE FLAG	
32.		82.		1
33.		83.	TAFMS	
34.		84.		2
35.		85.	DPOC	
36.		86.		2
37.		87.	DDOC	
38.		88.		2
39.	SERVICE OF ACCESSION	89.	HYEC	2
40.	PRIOR SERVICE	90.	PAYGRADE	2
41.	Y DATE OF ENTRY	91.	SERVICE	2
42.	M	92.	MARITAL STATUS	2
43.	D	93.	NUMBER OF DEPENDENTS	2
44.	TERM OF ENLISTMENT	94.		
46.	AFES STATION	96.		2
47.	SPANISH NAME FLAG	97.	ISC	2
48.	HEIGHT	98.	Y	
49.	WEIGHT	99.	M DATE OF SEPARATION	
50.	MONTHS IN DEP	100.	D	2

COL	DESCRIPTION	NOTES		DESCRIPTION
101.	BASD	2	151.	DOE YEAR INTO DEP
102.			152.	DOE MONTH INTO DEP
103.			153.	RESERVED
104.	Y ETS	2	154.	
106.	Y DOLE		156.	
107.	M		157.	
108.	CHARACTER OF SERVICE	2	158.	
109.	ELIGIBILITY TO REENLIST	2	159.	
110.	Y PEBD	2	160.	
111.	M		161.	
112.	D		162.	
113.	FILE FLAG	2	163.	NOTES: 1 - These data elements are obtained from the most recent match (master or loss, with master taking precedent). 2 - These data elements are obtained from the second most recent match Loss - These data elements are obtained from the first loss transaction match regardless of subsequent actions.
114.			164.	
115.	TAFMS	Loss	165.	
116.			166.	
117.	DPOC	Loss	167.	
118.			168.	
119.	DDOC	Loss	169.	
120.			170.	
121.	HYEC	Loss	171.	
122.	PAYGRADE	Loss	172.	
123.	SERVICE	Loss	173.	
124.	MARITAL STATUS	Loss	174.	
125.	DEPENDENTS	Loss	175.	
126.	SPN	Loss	176.	
127.			177.	
128.			178.	
129.	ISC	Loss	179.	
130.	Y	Loss	180.	
131.	M DATE OF SEPARATION		181.	
132.	D		182.	

COL	DESCRIPTION	NOTES	COL	DESCRIPTION
133.	Y		183.	
134.	M BASD		184.	
135.	D	Loss	185.	
136.	Y ETS		186.	
137.	M	Loss	187.	
138.	Y DOLE		188.	
139.	M	Loss	189.	
140.	CHARACTER OF SERVICE	Loss	190.	
141.	ELIGIBILITY TO REENLIST	Loss	191.	
142.	Y		192.	
143.	M PEBD		193.	
144.	D	Loss	194.	
145.	FILE FLAG	Loss	195.	
146.			196.	
147.			197.	
148.	FILE MATCH INDICATORS		198.	
149.			199.	
150.			200.	

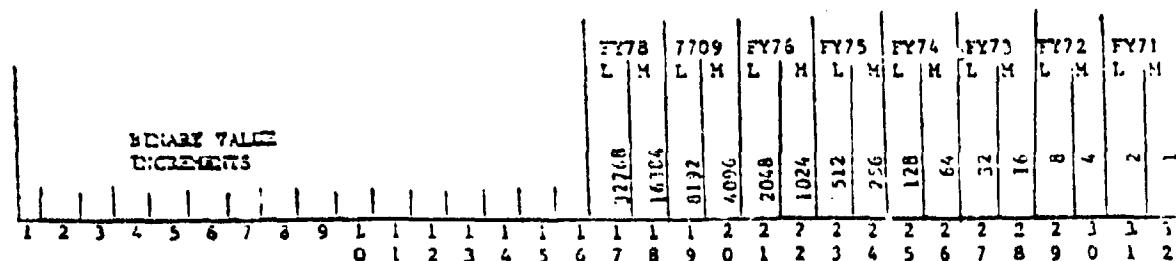
File Flag Indicators for Sections 1, 2, and Loss

Only one Binary value of the master or loss year matched will appear in the file flag indicator of each of the three sections. A positive value indicates a master file match, a negative value indicates a loss file match:

<u>File Matched</u>	<u>Binary Value</u>
FY71 Master	+7106
FY71 Loss	-7106
FY72 Master	+7206
FY72 Loss	-7206
FY73 Master	+7306
FY73 Loss	-7306
FY74 Master	+7406
FY74 Loss	-7406
FY75 Master	+7506
FY75 Loss	-7506
FY76 Master	+7606
FY76 Loss	-7606
P7709 Master	+7709
A7709 Loss	-7709
FY78 Master	+7809
FY78 Loss	-7809

File Match Indicators (Positions 147-150)

File match indicators show all matches by increments of the power of 2 to the four-byte binary value of the flag; i.e., a FY71 accession matching FY71 master, FY72 master, FY73 master, and FY74 loss would show a binary value of 149. This field may be treated as 32-bit positions and tested for bit position = '1' is a file match; bit position = '0' is no file match.



To investigate a match on a particular file take the 4-byte binary value of the flag and divide by the binary increment of the file of interest. To test the above example for a FY74 master match:

FY71 Master Match - Binary increment was	1
FY72 Master Match - Binary increment was	4
FY73 Master Match - Binary increment was	16
FY74 Loss Match - Binary increment was	<u>128</u>

149 is the binary value
of this flag

So, 149

64 - Binary increment of FY74 master match. If the division is even (2 in this case), there was NO file match; if odd, there was a file match.

COHORT FILES: CODING AND DATA ELEMENT DESCRIPTION (BINARY)

<u>DATA ELEMENT</u>	<u>TAPE POSITION</u>	<u>TITLE</u>	<u>DESCRIPTION</u>
1	1-4	Social Security Number (SSN)	Valid for values 000000001-999999998
2	5	Census Region	Standard Census group- ings of states into larger geographic entries: (See Appendix A) 1. New England 2. Middle Atlantic 3. East North Central 4. West North Central 5. South Atlantic 6. East South Central 7. West South Central 8. Mountain 9. Pacific 10. Other
3	6	Census District	Standard census group- ings states into larger geographic entries: (See Appendix A) 1. North East 2. North Central 3. South 4. West 5. Other
4	7-8	Home of Record Zip Code - First Three Digits	Valid for 000-999
5	9	Home of Record Zip Code - Last Two Digits	Valid for 00-99
6	10	Home of Record - State	See Appendix A
7	11-12	Home of Record - County	State and County codes combine to form FIPS codes

<u>DATA ELEMENT</u>	<u>TAPE POSITION</u>	<u>TITLE</u>	<u>DESCRIPTION</u>
8	13-15	Date of Birth	Year: Valid for 00-99 Month: Valid for 01-12 Day: Valid for 01-31
9	16	Age at Entry (Transaction)	Valid for 01-99
Age of individual at the time of entry (or at time of trans- action) computed by using date of birth and date of file.			
10	17	Reserved	
11	18	Highest Year of Educa- tion	1. 1-7 years 2. 8 years 3. 1 year high school 4. 2 years high school 5. 3-4 years high school - no diploma 6. High school diploma 7. 1 year college 8. 2 years college 9. 3-4 years college - no degree 10. College graduate 11. Masters or equivalent 12. Doctors or equivalent 13. High school GED
12	19	Sex	1. Male 2. Female
13	20	Race	1. Caucasian 2. Negro 3. Other
14	21	Ethnic	1. Spanish Descent 2. American Indian 3. Asian American 4. Puerto Rican 5. Filipino 6. Mexican American 7. Eskimo 8. Aleut 9. Cuban American 10. Chinese 11. Japanese 12. Korean 13. Other 14. None

Individual's ethnic status as reported by USAREC.

<u>DATA ELEMENT</u>	<u>TAPE POSITION</u>	<u>TITLE</u>	<u>DESCRIPTION</u>
15	22	Race Ethnic	1. Caucasian Non-Spanish 2. Caucasian Spanish 3. Negro 4. Malayan
16	23	Marital Status/ Authorized Dependents	10. Single - no dependents 11. Single - one dependents 12. Single - two dependents 13. Single - three dependents 14. Single - four dependents 15. Single - five dependents 16. Single - six dependents 17. Single - seven dependents 18. Single - eight dependents 19. Single - nine dependents 20. Married - no dependents 21. Married - one dependent 22. Married - two dependents 23. Married - three dependents 24. Married - four dependents 25. Married - five dependents 26. Married - six dependents 27. Married - seven dependents 28. Married - eight dependents 29. Married - nine dependents
17	24	Test Form	1. ECFA1 2. ECFA2 3. ECFA3 4. ASVAB 5. AFWST/5 6. AFWST/6 7. AFQT 7A, D 8. AFQT 7B 9. AFQT 7C 10. AFQT 8A, D 11. AFQT 8B/AQB 12. AFQT 8C/AQE66 13. SBTB 14. SBTB2 15. SBTB3 16. BTB3 17. BTB4 18. BTB5 19. BTB6 20. BTB7 21. BTB8 22. BTB-R1

DATA
ELEMENT

TAPE
POSITION

TITLE

DESCRIPTION

23. ACB73
24. ACT
25. AQB
26. AQE66
31. ASVAB1
32. ASVAB2
33. ASVAB3
34. ASVAB4
35. ASVAB5
36. ASVAB6
37. ASVAB7

Identification of the standardized test given and version of the test used to derive mental/aptitude percentiles.

18	25	AFQT Percentile (or equivalent)	Valid for values 01-99
19	26	AFQT Test Groups	AFQT SCORE
		1. (V)	1-9
		2. (IVc)	10-15
		3. (IVb)	16-20
		4. (IVa)	21-30
		5. (IIIb)	31-49
		6. (IIIa)	50-64
		7. (II)	65-92
		8. (I)	93-99

Aggregations of percentile test scores attained by individuals on the Armed Forces Qualification (or equivalent) Test.

20	27-38	Reserved	
21	39	Service of Accession	1. Army
			2. Navy
			3. Air Force
			4. Marine Corps
			5. Preinductee
			6. Inductee
			7. Army Reserve
			8. Navy Reserve
			9. Air Force Reserve
			10. Marine Corps Reserve
			11. Coast Guard
			12. Coast Guard Reserve
			13. Navy Inductee

<u>DATA ELEMENT</u>	<u>TAPE POSITION</u>	<u>TITLE</u>	<u>DESCRIPTION</u>
			14. Air Force Inductee 15. Marine Corps Inductee 16. Coast Guard Inductee 17. National Guard 18. Air Guard 19. Vista 20. Job Corps 21. Peace Corps 22. Merchant Marine 23. Other
22	40	Prior Service	1. Non-Prior Service 7. Prior Service Army 9. Prior Service Navy 11. Prior Service Air Force 13. Prior Service Marine Corps 15. Prior Service Coast Guard 16. Other
23	41-43	Date of Entry	Year: Valid for 00-99 Month: Valid for 01-12 Day: Valid for 01-31 Individual's date of entry onto active duty (or into DEP for for record type 2).
24	44	Term of Enlistment	Valid for values 01-99 Number of years of service for which an individual has con- tracted.
25	45	Entry Pay Grade	0 E00 1 E01 2 E02 3 E03 4 E04 5 E05 6 E06 7 E07 8 E08 9 E09 10 W00 11 W01 12 W02 13 W03 14 W04 20 000 21 001 22 002

DATA
ELEMENT

TAPE
POSITION

TITLE

DESCRIPTION

23 003
24 004
25 005
26 006
27 007
28 008
29 009
30 010
31 011

26

44

AFES Station

USAREC
CODING

1.	Albany NY	A01
2.	Ashland KY	Closed
3.	Baltimore MD	A02
4.	Bangor ME	Closed
5.	Beckley WV	A21
6.	Boston MA	A03
7.	Buffalo NY	A04
8.	Cincinnati OH	B55
9.	Cleveland OH	B56
10.	Columbus OH	B57
11.	Fairmont WV	Closed
12.	Harrisburg PA	A06
13.	Louisville KY	B27
14.	Manchester NH	A07
15.	Newark NJ	A08
16.	New Haven CT	A09
17.	Whitehall NY	Closed
18.	Philadelphia PA	A10
19.	Pittsburg PA	A11
20.	Portland ME	A12
21.	Providence RI	Closed
22.	Richmond VA	B32
23.	Roanoke VA	Closed
24.	Springfield MA	A13
25.	Syracuse NY	A14
26.	Wilkes Barre PA	A15
27.	Fort Hamilton NY	A05
28.	Atlanta GA	AB20
29.	Charlotte NC	A22
30.	Coral Gables FL	A23
31.	Fort Jackson SC	A24
32.	Jackson MS	B42
33.	Jacksonville FL	A25
34.	Knoxville TN	B26
35.	Memphis TN	B45

<u>DATA ELEMENT</u>	<u>TAPE POSITION</u>	<u>TITLE</u>	<u>DESCRIPTION</u>
		36. Montgomery AL	B28
		37. Nashville TN	B29
		38. Raleigh NC	A31
		39. San Juan PR	A30
		40. Abilene TX	Closed
		41. Albuquerque NM	C36
		42. Amarillo TX	C37
		43. Dallas TX	C38
		44. El Paso TX	C40
		45. Houston TX	C41
		46. Little Rock AR	B44
		47. New Orleans LA	B46
		48. Oklahoma City OK	C47
		49. San Antonio TX	C48
		50. Shreveport LA	B49
		51. Chicago IL	B54
		52. Denver CO	C39
		53. Des Moines IA	B58
		54. Detroit MI	B59
		55. Fargo ND	B60
		56. Indianapolis IN	B61
		57. Kansas City KA	B43
		58. Milwaukee WI	B62
		59. Minneapolis MN	B63
		60. Omaha NE	B64
		61. Sioux Falls SD	B65
		62. St. Louis MO	B66
		63. Boise ID	C70
		64. Butte MT	C71
		65. Salt Lake City UT	C78
		66. Fresno CA	C72
		67. Los Angeles CA	C74
		68. Oakland CA	C75
		69. Phoenix AZ	C76
		70. Portland OR	C77
		71. Seattle WA	C79
		72. Spokane WA	C80
		73. Anchorage AK	C81
		74. Honolulu HA	C73
		75. Guam	C82
27	47	Spanish Surname Flag	1. Individual has Spanish surname

This flag is set based on individual's name having matched DMDC Spanish-surname tape.

<u>DATA ELEMENT</u>	<u>TAPE POSITION</u>	<u>TITLE</u>	<u>DESCRIPTION</u>
28	48	Height	Valid for values 01-99 An individual's height in inches (all fractions are dropped).
29	49	Weight	Valid for values 01-255 Note: For all above values a base of 89 pounds is implied; i.e., 1 = 89 pounds An individual's weight expressed in pounds (fractional values rounded to nearest pound).
30	50	Reserved	
31	51-52 83-84 115-115	Total Active Federal Military Service (TAFMS)	Valid for 001-420 TAFMS reflect member's active service in months. This value is computed by the DMDC edit program by subtracting Basic Active Service Date from As of Date of the File (MASTER File) or the Date of Separation (LOSS File). Computed values of zero are combined with values of 1. Values from 421 to 480 months are recorded to 420 months. Values above 480 are recorded to unknown.
32	53-54 85-86	DoD Primary Occupation (DPOC)	See DoD Publication 1312.1-E and 1312.1-0 Coding for this variable is taken from DoD Publications 1312.1-E and 1312.0 "Occupational Conversion Table". This conversion table translates individual Service occupational designations into a common coding and occupational scheme in order to facilitate cross-Service occupational comparisons. The Primary Occupation Code indicates the occupation for which the Service member has been trained or the most signi- ficant skill held by the individual. The coding for the officer occupation codes has been modified to enable packed storage of this data element. For officers, the DoD occu- pation code is a number followed by a letter. The code is modified and stored as follows: the number is multiplied by 100, the letter is converted to its numeric equivalent (A = 01, B = 02, etc.) and added to the number. So 4L would be encoded as 412, 2D would be 204, etc.

<u>DATA ELEMENT</u>	<u>TAPE POSITION</u>	<u>TITLE</u>	<u>DESCRIPTION</u>
33	55-56 87-83 119-120	DoD Duty Occupation Code (DDOC)	See DoD Publication 1312.1-E and 1312.1-0

The Duty Occupation Code reflects the occupation that the member is actually working in for Army, Marine Corps, and Air Force. For Navy, DDOC represents the third most significant skill held by the Service member. Refer to DPOC above for coding description and comments.

34	57 89	Highest Year of Education (HYEC)	<ol style="list-style-type: none"> 1. 1-7 years of elementary school completed 2. 8 years of elementary school completed 3. 1 year high school completed 4. 2 years high school completed 5. 3 or 4 years high school completed with no diploma or no GED 6. High school graduate, diploma or GED 7. 1 year college completed 8. 2 years college completed 9. 3 or 4 years college 10. College graduate 11. Masters degree received or other professional degrees beyond college, other than a doctorate 12. Doctorate degree received
----	----------	----------------------------------	--

This data element reflects Highest Year of Education attained by the Service member as reported by the Service.

35	58 90 122	Pay Grade (PG)	<ol style="list-style-type: none"> 00 Enlisted Unknown 01-09 E1-E9 10 Warrant Officer Unknown 11-14 W1-W4 20 Commissioned Officer Unknown 21-31 O1-O11
----	-----------------	----------------	--

<u>DATA ELEMENT</u>	<u>TAPE POSITION</u>	<u>TITLE</u>	<u>DESCRIPTION</u>
		Member's pay grade at as-of-date of the file or date of separation. If Warrant Officer/Commissioned Officer designator is missing, pay grade is assumed to be an officer pay grade. If pay grade is also missing, field is shown as officer unknown (20).	
35	59 91 123	Service (SCV)	1. Army (A) 2. Navy (N) 3. Marine Corps (M) 4. Air Force (F)
37	60 92 124	Marital Status (MS)	1. Single, Divorced, Interlocutory Decree, Legally Separated, Widowed, or Marriage Annulled 2. Married
38	61 93 125	Number of Dependents (DEPS)	1. No dependents 2. 1 dependent 3. 2 dependents 4. 3 dependents 5. 4 dependents 6. 5 dependents 7. 6 dependents 8. 7 dependents 9. 8-15 dependents
Submission values greater than 15 are recorded to unknown.			
39	62-64 94-96 126-128	Separation Program Designator (SPD)	Actual SPD, no coding change

This data element indicates the reason for a Service member's separation or discharge. This three position code is formed from two separate data elements. The first position is DoD standard data element SE-LA "Separation Type, Military". The second and third positions are SE-LC, "Separation Reason, Military". This code is not stored in a packed binary format. SPD is coded only for loss records.

<u>DATA ELEMENT</u>	<u>TAPE POSITION</u>	<u>TITLE</u>	<u>DESCRIPTION</u>
40	65 97	Inter-Service Separation Code	Coding and conversion in Attachment B
		This code summarizes and standardizes across Services the separation reason for information contained in the SPD data element.	
41	66-68 98-100 130-132	Date of Separation	Year: Year of the file, or year of the file -1 Month: 01-12 Day: 01-31
		Denotes member's data of separation in the loss. Edit accepts all records whose date of separation/accession is no more than one year before the as-of-date of the file. Loss and gain records are then merged into the appropriate file based on this date. Records showing dates more than one year previous to the as-of-date, or invalid dates are dropped.	
42	69-71 102-105 133-135	Active Duty Base Date (BASD)	Year: 01-99 Month: 01-12 Day: 01-31
		This is the data, as adjusted, that indicates the start of the Service member's active duty.	
43	72-73 104-105 136-137	ETS Data (ETS)	Year: 01-99 Month: 01-12
		Estimated date at which member will fulfill obligated active duty.	
44	74-75 106-107 133-139	Date of Latest Enlistment/Reenlistment/Extension (DOLE)	Year: 01-99 Month: 01-12
		Reflects date at which member started his current tour of duty.	
45	76 108 140	Character of Service (CSVC)	1. Honorable (A) 2. Under Honorable Conditions (B) 3. Under other than Honorable Conditions (E) 4. Dishonorable (F)

<u>DATA ELEMENT</u>	<u>TAPE POSITION</u>	<u>TITLE</u>	<u>DESCRIPTION</u>
46	77 109 141	Reenlistment Eligibility (RE)	1. Eligible to reenlist. 2. Ineligible to reenlist
For enlisted loss records, indicates eligibility to reenlist. FY73 and FY74 Navy loss files have reenlistment codes from DD214. See file manager for information on these codes.			
47	78-80 110-112 142-144	Pay Entry Base Date (PEBD)	Year: 01-99 Month: 01-12 Day: 01-31
This data, as adjusted, indicates start of member's Service for pay purposes.			
48	81-82 113-114 145-146	File Flag	See notes
49	147-148	File Match Indicator	See notes

HOME OF RECORD STATE, ZIP, REGION, AND DISTRICT

<u>STATE</u>	<u>ABBREVIATION</u>	<u>CODE</u>	<u>THREE DIGIT ZIPS</u>	<u>CENSUS REGION</u>	<u>DISTRICT</u>
Alabama	AL	01	350-369	6	3
Alaska	AK	02	995-999	9	4
American Samoa	AO	03	967(99)	10	5
Arizona	AZ	04	850-865	8	4
Arkansas	AR	05	716-729	7	3
California	CA	06	900-966*	9	4
Canal Zone	PQ	07	---	10	5
Colorado	CO	08	800-816	8	4
Connecticut	CT	09	060-069	1	1
Delaware	DE	10	197-199	5	3
District of Columbia	DC	11	200-205	5	3
Florida	FL	12	320-339	5	3
Georgia	GA	13	300-319	5	3
Guam	GQ	14	969	10	5
Hawaii	HI	15	967-968	9	4
Idaho	ID	16	832-838	8	4
Illinois	IL	17	600-629	3	2
Indiana	IN	18	460-479	3	1
Iowa	IA	19	500-528	4	
Kansas	KS	20	660-679	4	2
Kentucky	KY	21	400-427	7	3
Louisiana	LA	22	700-714	7	3
Maine	ME	23	039-049	1	1
Maryland	MD	24	206-219	5	3
Massachusetts	MA	25	010-027	1	1
Michigan	MI	26	480-499	3	2
Minnesota	MN	27	550-567	4	2
Mississippi	MS	28	386-397	6	3
Missouri	MO	29	630-651	4	2
Montana	MT	30	590-595	8	4
Nebraska	NE	31	680-693	4	2
Nevada	NV	32	890-898	8	4
New Hampshire	NH	33	030-038	1	1
New Jersey	NJ	34	070-089	2	1
New Mexico	NM	35	870-884	8	4
New York	NY	36	090-149*	2	1
North Carolina	NC	37	270-289	5	1
North Dakota	ND	38	570-577	4	1
Ohio	OH	39	430-458	3	2
Oklahoma	OK	40	730-749	7	3
Oregon	OR	41	970-979	9	1
Pennsylvania	PA	42	150-196	2	1

*Includes military APO and FPO zips.

<u>STATE</u>	<u>ABBREVIATION</u>	<u>CODE</u>	<u>THREE DIGIT ZIPS</u>	<u>CENSUS REGION</u>	<u>DISTRICT</u>
Puerto Rico	RQ	43	006,007,009	10	5
Rhode Island	RI	44	028-029	1	1
South Carolina	SC	45	290-299	5	3
South Dakota	SD	46	570-577	4	2
Tennessee	TN	47	370-385	6	3
Texas	TX	48	750-799	7	3
Utah	UT	49	840-847	8	4
Vermont	VT	50	050-059	1	1
Virginia	VA	51	220-246	5	3
Virgin Islands	VQ	52	008	10	5
Washington	WA	53	980-994	9	4
West Virginia	WV	54	247-268	5	3
Wisconsin	WI	55	530-549	3	2
Wyoming	WY	56	820-831	8	4

INTERSERVICE SEPARATION CODES

The Interservice Separation Codes (ISC) were developed to enable meaningful cross-service comparison of separation reason for both enlisted and officer personnel. Originally developed with Separation Program Numbers (SPN), the ISC codes are now based on the DoD Standard Data Element, Separation Program Designator (SPD). ISC codes, in addition to providing cross-service comparisons, now also enable longitudinal comparison of separation reason in spite of the change from SPN to SPD.

ISC codes are meaningful at the 1 and 2-digit level. The first position of the code puts the cause for separation in a broad category (e.g., 0 = Release from Active Service), the second position specifies the cause within that broad category (e.g., 03 = Early Release to Attend School).

For officers, the ISC code is a direct conversion from the SPD code. For enlisted personnel, ISC codes are an interaction between SPD and character of service. Most often, a man who fails to meet minimum behavioral or performance criteria for retention in the Armed Services will be given an SPD which reflects this failure. For a separation of this type, it is quite easy to pin down the cause for the man's separation. Occasionally, however, a man will receive an SPD which implies a successful tour, paired with a character of service that is other than "Honorable". Here the implication is clear that the man failed, in some way, to perform at the level expected, but where the man failed is not clear under this set of circumstances. The ISC coding, in order to reflect this failure, would assign a man under these circumstances a code of 82: Unsuitability (Reason Unknown). It is important to note that this occurs only when the man's SPD implies a successful completion and the character of service is other than "Honorable". More specifically, if the man has a character service other than "Honorable" and his SPD would yield an ISC of 01-08, 10-16, 22, 40-42, 50-52, 90, 98, or 99, this man would be assigned an ISC code of 82 -- Unsuitability (Reason Unknown).

INTERSERVICE SEPARATION CODES

PART I: ENLISTED

- 00 Transactions
FHC, KHC, MHC. Air Force: 475, 490, 491, 493, 900-912
Marine Corps: GKF, HKF, JKF
- 0 Release from Active Service
 - 01 Expiration of Term of Service
FBK, FBL, JBK, KBK, KEA, KEC, LBK, MBK, MBN, MEA, MEC
 - 02 Early Release - Insufficient Retainability
JBM, JED, KBM, LBM, LED, MBM. Air Force: J10
 - 03 Early Release - To Attend School
KCE, KCF, MCE, MCF
 - 04 Early Release - Police Duty
KCG, MCG
 - 05 Early Release - In the National Interest
JDJ, KCK, KDJ, MCK, MDJ
 - 06 Early Release - Seasonal Employment
KCJ, MCJ
 - 07 Early Release - To Teach
KCH, MCH
 - 08 Early Release - Other (Including RIF)
JCC, JDM, JDR, KCC, KDM, KDR, KEB, LCC, LDM, LDR, LGJ, MCC,
MDM, MDR, MEB, MGJ, XDM. Air Force: 711, 712, 715, 716, 717
- 1 Medical Disqualifications
 - 10 Conditions Existing Prior to Service
GFN, JFM, JFN, KFN
 - 11 Disability - Severance Pay
JFL
 - 12 Permanent Disability - Retired
RFJ, SFJ, VFJ
 - 13 Temporary Disability - Retired
RFK, SFK, VFK, WFK
 - 14 Disability - Non EPTS - No Severance Pay
JFR, LFR

- 15 Disability - Title 10 Retirement
- 16 Unqualified for Active Duty - Other
GFT, GFV, HFT, HEV, JFT, JFV, KFT, KFU, KFV, LFT, MFT, XFT
- 2 Dependency or Hardship
 - 22 Dependency or Hardship
KDB, KDH, MDB, MDH, XDH
- 3 Death
 - 30 Battle Casualty
Army: 944. Marine Corps: H61-H69, 861-869. Navy: 870-879
 - 31 Non-Battle - Disease
Army: 945. Marine Corps: H24, 824. Navy: 892.
 - 32 Non-Battle - Other
Army: 946. Marine Corps: H4G, H21-H23, H25-H29, 82B, 82E, 82I, 83C, 84B, 85B, 85D, 85I, 821-823, 825-850. Navy: 880-891, 893-899.
 - 33 Death - Cause Not Specified
Air Force: 474
- 4 Entry into Officer Programs
 - 40 Officer Commissioning Program
KGL, KGM, KGN, KGS, KGX, MGX
 - 41 Warrant Officer Program
KGT, KGW
 - 42 Service Academy
KGU, MGU, PGU
- 5 Retirement (Other than Medical)
 - 50 20-30 Years of Service
JBD, KBD, NBD, RBD, SBD
 - 51 Over 30 Years of Service
RBC
 - 52 Other Categories
RBB, VBK, XBK, XDS

- 6 Failure to Meet Minimum Behavioral or Performance Criteria
- 60 Character or Behavior Disorder
GMB, GMK, HMB, JMB, JMK, KMB
 - 61 Motivational Problems
GMJ, HMJ, JMJ
 - 62 Enuresis
GMC, HMC, JMC
 - 63 Inaptitude
GMD, HMD, JMD
 - 64 Alcoholism
GMG, HMG, JMG
 - 65 Discreditable Incidents - Civilian or Military
GKA, GLB, HKA, HLB, JKA, JLB
 - 66 Shirking
GKJ, GLJ, HKJ, HLJ, JKJ, JLJ
 - 67 Drugs
BLF, GFK, GLF, GMM, GPB, HKK, HLF, HMM, JKK, JLF, JMM, JPB
 - 68 Financial Irresponsibility
GKE, GLG, GMH, HKE, HLG, HMH, JKE, JLG, JMH, KLG
 - 69 Lack of Dependent Support
GKH, GLH, HKH, HLH, JKH, JLH
 - 70 Unsanitary Habits
GLK, GMP, HLK, HMP, JKV, JLK, JMP
 - 71 Civil Court Conviction
GKB, HKB, JKB
 - 72 Security
BDK, GDK, HDK, JDK, LDK
 - 73 Court Martial
GJB, HJB, JJB, JJC, JJD
 - 74 Fraudulent Entry
GKG, HKG, JKG, YKG
 - 75 AWOL, Desertion
GKD, HKD, JKD. Air Force, Army, Navy: GKF, HKF, JKF

- 76 Homosexuality
BLC, BML, DLC, GKC, GLC, GML, HKC, HLC, HML, JKC, JLC, JML
- 77 Sexual Perversion
GKL, GLL, GMF, HKL, HLL, HMF, JKL, JLL, JMF
- 78 Good of the Service
BFS, DFS, JFS, KFS, KML
- 79 Juvenile Offender
JFE
- 80 Misconduct (Reason Unknown)
BNC, GNC, HNC, JPP, JHM, JNC. Air Force: J11
- 81 Unfitness (Reason Unknown)
BLM, JNG, KLM
- 82 Unsuitability (Reason Unknown)
BHJ, BHK, BMN, CBL, GHK, GMN, HHJ, HMN, JHK
Army, Marine Corps, Air Force: JHJ
Navy, Marine Corps, Air Force: KMN
- 84 Basic Training Attrition
- 85 Failure to Meet Minimum Qualifications for Retention
JGF, JHE, KGF
Army, Navy, Marine Corps: JET, JGZ
Navy, Marine Corps, Air Force: LEM
Navy, Marine Corps: JEM, JGH
- 86 Expeditious Discharge
Army: JGH, KMN
Navy: JHJ
Marine Corps: JFG
Air Force: JEM, JGH
- 87 Trainee Discharge
Army: JEM, JNF, LEM, LNF
Air Force: JET, JGZ
- 9 Other Separations or Discharges
- 90 Secretarial Authority
JFF, KFF, LFF, MFF. Air Force: 713
- 91 Erroneous Enlistment or Induction
JFC, KFC, LFC, MFC, YFC

- 92 Sole Surviving Son
KCQ, MCQ
- 93 Marriage
KDC, MDC
- 94 Pregnancy
FDF, HDF, JDF, KDF, MDF
- 95 Minority
JFB, KFB, YFB
- 96 Conscientious Objector
FCM, JCM, KCM
- 97 Parenthood
FDG, JDG, KDG, MDG
- 98 Breach of Contract
JDP, KDP, KDS, KDQ, LDP, MDP, MDS, XDP
- 99 Other
FBC, FMD, GHF, JBB, JBC, JBH, JCP, JDN, JHD, JHF, JND,
KBH, KBJ, KCP, KDN, KFG, KHD, KHF, KND, KNF, LBH, LDN,
LFG, LND, MDN, MFG, MHD, MND, MNF, VNF, XND, YCP, YDN,
YND
Army, Navy, Air Force: JFG
Navy, Marine Corps, Air Force: JNF, LNF

APPENDIX E

CENSUS REGIONS - STATES IN THE REGIONS

STANDARD CENSUS GROUPINGS OF STATES
- CENSUS REGION -

<u>REGION</u>	<u>STATES INCLUDED</u>
New England (1)	Connecticut (09), Maine (23), Massachusetts (25), New Hampshire (33), Rhode Island (44), Vermont (50)
Middle Atlantic (2)	New Jersey (34), New York (36), Pennsylvania (42)
East North Central (3)	Illinois (17), Indiana (18), Michigan (26), Ohio (39), Wisconsin (55)
West North Central (4)	Iowa (19), Kansas (20), Minnesota (27), Missouri (29), Nebraska (31), North Dakota (38), South Dakota (46)
South Atlantic (5)	Delaware (10), District of Columbia (11), Florida (12), Georgia (13), Maryland (24), North Carolina (37), South Carolina (45), Virginia (51), West Virginia (54)
East South Central (6)	Alabama (1), Kentucky (21), Mississippi (28), Tennessee (47)
West South Central (7)	Arkansas (5), Louisiana (22), Oklahoma (40), Texas (48)
Mountain (8)	Arizona (4), Colorado (8), Idaho (16), Montana (30), Nevada (32), New Mexico (35), Utah (49), Wyoming (56)
Pacific (9)	Alaska (2), California (6), Hawaii (15), Oregon (41), Washington (53)
Other (10)*	American Samoa (3), Canal Zone (7), Guam (14), Puerto Rico (43), Virgin Islands (52)

*For this project, the records originally coded Foreign in the Job Corps state code were placed in region 10.

APPENDIX F

MEAN AFQT SCORES FOR NON-PRIOR SERVICE
MALE ACCESSIONS BY EDUCATIONAL LEVEL,
FISCAL YEAR OF ENLISTMENT,
AND BRANCH OF SERVICE

MEAN ARMED FORCES QUALIFICATION TEST (AFQT) SCORES FOR
 NON-PRIOR SERVICE MALE ACCESSIONS BY EDUCATIONAL LEVEL,
 FISCAL YEAR OF ENTRY, AND SERVICE - ARMY -

<u>FISCAL YEAR OF ENTRY</u>	<u>GED</u>	<u>NON-HIGH SCHOOL GRADUATE</u>	<u>HIGH SCHOOL GRADUATE</u>
1973	56.3	46.6	57.6
1974	51.5	44.2	53.6
1975	53.5	46.2	55.9
1976	52.1	49.6	55.4
1977	49.6	46.5	51.5
1978	49.0	49.3	53.9
1979	48.2	46.1	50.9

MEAN ARMED FORCES QUALIFICATION TEST (AFQT) SCORES FOR
NON-PRIOR SERVICE MALE ACCESSIONS BY EDUCATIONAL LEVEL,
FISCAL YEAR OF ENTRY, AND SERVICE - NAVY -

<u>FISCAL YEAR OF ENTRY</u>	<u>GED</u>	<u>NON-HIGH SCHOOL GRADUATE</u>	<u>HIGH SCHOOL GRADUATE</u>
1973	-	43.3	61.0
1974	-	48.9	62.2
1975	-	49.9	61.7
1976	60.3	57.8	63.0
1977	60.9	54.8	62.4
1978	64.0	57.5	61.0
1979	64.3	57.2	58.8

MEAN ARMED FORCES QUALIFICATION TEST (AFQT) SCORES FOR
NON-PRIOR SERVICE MALE ACCESSIONS BY EDUCATIONAL LEVEL,
FISCAL YEAR OF ENTRY, AND SERVICE - MARINE CORPS -

<u>FISCAL YEAR OF ENTRY</u>	<u>GED</u>	<u>NON-HIGH SCHOOL GRADUATE</u>	<u>HIGH SCHOOL GRADUATE</u>
1973	50.7	48.1	53.8
1974	56.2	55.3	58.1
1975	54.0	55.6	59.5
1976	64.8	58.2	60.7
1977	60.2	53.4	57.1
1978	59.3	53.3	54.8
1979	58.1	53.5	54.2

MEAN ARMED FORCES QUALIFICATION TEST (AFQT) SCORES FOR
 NON-PRIOR SERVICE MALE ACCESSIONS BY EDUCATIONAL LEVEL,
 FISCAL YEAR OF ENTRY, AND SERVICE - AIR FORCE -

<u>FISCAL YEAR OF ENTRY</u>	<u>GED</u>	<u>NON-HIGH SCHOOL GRADUATE</u>	<u>HIGH SCHOOL GRADUATE</u>
1973	53.3	59.8	61.8
1974	50.4	75.3	61.1
1975	54.7	67.7	62.2
1976	58.9	71.2	65.4
1977	61.7	73.0	67.1
1978	58.1	69.6	64.8
1979	58.1	69.1	62.5

APPENDIX G

MEAN ASVAB SUBTEST SCORES FOR FY77 NPS
MALE ACCESSIONS - BY EDUCATIONAL LEVEL
AND BY BRANCH OF SERVICE

MEAN ARMED SERVICES VOCATIONAL APTITUDE (ASVAB) SCORES
FOR FY77 NON-PRIOR SERVICE MALE ACCESSIONS - BY EDUCA-
TIONAL LEVEL AND SERVICE - ARMY -

<u>ASVAB SUBTEST</u>	<u>GED</u>	<u>NON-HIGH SCHOOL GRADUATE</u>	<u>HIGH SCHOOL GRADUATE</u>
General Information	8.9	8.3	9.2
Numerical Operations	28.6	27.1	30.2
Attention to Detail	14.0	13.8	14.4
Word Knowledge	18.2	16.7	18.6
Arithmetic Reasoning	11.8	11.0	12.1
Spatial Perception	11.8	11.9	11.7
Math Knowledge	10.1	8.9	11.0
Electrical Information	18.4	17.3	18.2
Mechanical Comprehension	10.0	9.4	9.9
General Science	10.2	9.2	10.6
Shop Information	13.1	12.7	12.8
Automotive Information	11.3	10.3	10.9

MEAN ARMED SERVICES VOCATIONAL APTITUDE (ASVAB) SCORES
FOR FY77 NON-PRIOR SERVICE MALE ACCESSIONS - BY EDUCA-
TIONAL LEVEL AND SERVICE - NAVY -

ASVAB SUBTEST	GED	NON-HIGH SCHOOL GRADUATE	HIGH SCHOOL GRADUATE
General Information	10.0	9.3	10.3
Numerical Operations	30.6	29.4	32.9
Attention to Detail	14.2	14.1	14.7
Word Knowledge	21.0	19.4	21.4
Arithmetic Reasoning	13.4	12.3	13.7
Spatial Perception	13.4	13.1	13.1
Math Knowledge	11.4	10.3	12.8
Electrical Information	20.4	19.2	20.6
Mechanical Comprehension	11.7	10.7	11.7
General Science	11.8	10.7	12.3
Shop Information	14.8	14.1	14.5
Automotive Information	12.7	11.6	12.4

MEAN ARMED FORCES VOCATIONAL APTITUDE (ASVAB) SCORES
FOR FY77 NON-PRIOR SERVICE MALE ACCESSIONS - BY EDUCA-
TIONAL LEVEL AND SERVICE - MARINE CORPS -

<u>ASVAB SUBTEST</u>	<u>GED</u>	<u>NON-HIGH SCHOOL GRADUATE</u>	<u>HIGH SCHOOL GRADUATE</u>
General Information	9.8	8.8	9.6
Numerical Operations	31.2	28.8	31.8
Attention to Detail	13.9	13.9	14.5
Work Knowledge	21.4	19.5	20.1
Arithmetic Reasoning	13.5	12.2	12.8
Spatial Perception	12.9	12.2	12.6
Math Knowledge	11.1	9.7	11.7
Electrical Information	19.4	17.8	18.9
Mechanical Comprehension	10.9	9.8	10.5
General Science	11.2	9.8	11.0
Shop Information	14.2	13.2	13.6
Automotive Information	12.1	10.7	11.3

MEAN ARMED FORCES VOCATIONAL APTITUDE (ASVAB) SCORES
FOR FY77 NON-PRIOR SERVICE MALE ACCESSIONS - BY EDUCA-
TIONAL LEVEL AND SERVICE - AIR FORCE -

<u>ASVAB SUBTEST</u>	<u>GED</u>	<u>NON-HIGH SCHOOL GRADUATE</u>	<u>HIGH SCHOOL GRADUATE</u>
General Information	10.2	10.8	10.9
Numerical Operations	31.6	32.6	34.7
Attention to Detail	14.4	14.7	15.2
Word Knowledge	21.5	24.0	23.0
Arithmetic Reasoning	13.9	15.3	14.8
Spatial Perception	12.7	14.6	13.1
Math Knowledge	12.2	13.5	13.9
Electrical Information	21.3	22.2	21.6
Mechanical Comprehension	12.3	13.4	12.5
General Science	12.2	13.4	13.1
Shop Information	15.1	15.7	15.1
Automotive Information	13.7	13.9	13.3

APPENDIX H

PAY GRADE DISTRIBUTIONS FOR CY77 NPS
MALE ACCESSIONS ON ACTIVE DUTY
30 SEPTEMBER 1979 - BY
EDUCATIONAL LEVEL,
AFQT CATEGORY, AND
SERVICE

PAY GRADE DISTRIBUTIONS FOR CY77 NON-PRIOR SERVICE MALE ACCESSIONS ON ACTIVE DUTY
30 SEPTEMBER 1979 - BY EDUCATIONAL LEVEL, AFQT CATEGORY AND SERVICE

- ARMY -

PAY GRADE	EDUCATIONAL LEVEL AT ENTRY														
	GED					NON-HIGH SCHOOL GRADUATES					HIGH SCHOOL GRADUATES				
	1E2	3A	3B	4	Tot	1A7	1E	3B	4	Tot	1E2	3A	3B	4	Tot
E-5	100%	8	5	2	7	3	2	1	1	1	9	4	2	1	4
E-4	63	63	63	59	63	65	61	59	61	60	71	70	63	66	69
E-3	20	23	26	31	24	26	29	31	31	30	18	23	26	29	24
E-2	3	3	3	4	3	4	5	5	4	5	1	2	2	3	2
E-1	2	3	3	4	3	2	3	4	3	4	1	1	2	2	1
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
MEAN	3.8	3.7	3.6	3.5	3.7	3.6	3.5	3.5	3.5	3.5	3.5	3.7	3.7	3.6	3.7

NOTE: AFQT Categories 1 through 6 are based on percentile scores on the Armed Forces Qualification Test Percentages not shown in cases of less than 100.

PAY GRADE DISTRIBUTIONS FOR CY77 NON-PRIOR SERVICE MALE ACCESSORS ON ACTIVE DUTY
30 SEPTEMBER 1979 - BY EDUCATIONAL LEVEL, AFQT CATEGORY AND SERVICE

- NAVY -

PAY GRADE	EDUCATIONAL LEVEL AT ENTRY													
	NON-HIGH SCHOOL GRADUATES					HIGH SCHOOL GRADUATES					TOTAL			
	182	3A	3B	4	TOT	182	3A	3B	4	TOT	182	3A	3B	TOT
E-5	3	1	1	-	2	1	0	0	-	0	9	1	0	0
E-4	38	24	14	-	27	25	14	9	-	15	53	35	24	79
E-3	40	48	55	-	47	48	52	52	-	51	32	52	55	45
E-2	14	16	21	-	16	18	24	28	-	24	5	9	24	9
E-1	5	11	9	-	8	8	10	11	-	10	1	3	4	2
TOTAL	100%	100%	100%	-	100%	100%	100%	100%	-	100%	100%	100%	100%	100%
MEAN	3.2	2.9	2.8	-	3.0	2.9	2.7	2.6	-	2.7	3.6	3.2	3.0	3.3
											100%	100%	100%	100%
											3.5	3.1	2.9	3.3

NOTE: AFQT Categories 1 through 4 are based on percentile scores on the Armed Forces Qualification Test. Percentages not shown in cases of less than 100.

PAY GRADE DISTRIBUTIONS FOR CY77 HIGH-PRIOR SERVICE MALE ACCESSIONS OR ACTIVE DUTY
30 SEPTEMBER 1979 - BY EDUCATIONAL LEVEL, AFQT CATEGORY AND SERVICE

- MARINE CORPS -

PAY GRADE	EDUCATIONAL LEVEL AT ENTRY													
	GED				HIGH-HIGH SCHOOL GRADUATES				AFQT CATEGORY					
	1E2	2A	4B	4	101	1E2	3A	3B	4	101	1E2	3A	3B	4
E-5	3	2	1	-	2	1	1	1	-	1	5	2	1	0
E-4	27	19	18	-	27	20	16	11	-	15	40	30	22	17
E-3	56	58	65	-	60	60	63	65	-	63	50	55	62	54
E-2	10	43	9	-	7	12	12	15	-	13	4	5	7	7
E-1	4	6	7	-	4	7	8	8	-	8	1	3	3	4
TOTAL	100%	100%	100%	-	100%	100%	100%	100%	-	100%	100%	100%	100%	100%
MEAN	3.6	2.9	3.0	-	3.2	3.0	2.9	2.8	-	2.9	3.4	3.2	3.1	3.0

NOTE: AFQT Categories 1 through 4 are based on percentile scores on the Armed Forces Qualification Test. Percentages not shown in last column are less than 100.

PAY GRADE DISTRIBUTIONS FOR CV77 NON-PRIOR SERVICE MALE RECRUITS ON ACTIVE DUTY
30 SEPTEMBER 1979 - BY EDUCATIONAL LEVEL, AIQI CATEGORY AND SERVICE
- AIR FORCE -

PAY GRADE	EDUCATIONAL LEVEL AT ENTRY													
	GED				HIGH SCHOOL GRADUATES				HIGH SCHOOL GRADUATES				TOTAL	
	3A		3B		3A		3B		3A		3B			
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
E-5	0	0	0	0	0	1	0	0	1	0	0	0	0	0
E-4	9	8	6	8	6	9	-	7	11	8	7	11	8	7
E-3	28	86	89	87	90	84	-	89	67	90	91	87	90	91
E-2	2	4	2	3	2	3	-	3	1	1	1	1	1	1
E-1	1	2	3	2	2	3	-	2	0	1	1	1	1	1
TOTAL	100%	100%	100%	100%	100%	100%	-	100%	100%	100%	100%	100%	100%	100%
MEAN	3.1	3.0	3.0	3.0	3.0	3.0	-	3.0	3.1	3.1	3.1	3.1	3.1	3.1

NOTE: AIQI Categories 1 through 4 are based on percentile scores on the Armed Forces Qualification Test. Percentages not shown in cases of less than 100.

Initial Distribution List

	<u>Number of Copies</u>
Prof. R. S. Elster Code 54Ea U.S. Naval Postgraduate School Monterey, CA 93940	20
Dr. Eli Flyer The BDM Corporation P.O. Box 2019 2600 Garden Road Monterey, CA 93940	5
Dr. Douglas Whitney American Council on Education One Dupont Circle Washington, D.C. 20036	5
Dr. Jane Flaherty Associate Director, CLEP Educational Testing Service Princeton, NJ 08541	5
Dr. Joan Fischer Associate Directory, Community Affairs Worcester State College 486 Chandler Street Worcester, MA 01602	5
Dr. Robert Hayles Office of Naval Research Code 452 BCT#1 800 North Quincy Street Arlington, VA 22217	5
Dr. Jerome Lord National Institute of Education Room 822 1200 19th Street, N.W. Washington, D.C. 20208	15
Mr. Andrew H. Bayes Head, Program Development Defense Activity for Non-Traditional Education Support Pensacola, FL 32509	2

Initial Distribution List (cont.)

No. of copies

Deputy Chief of Naval Operations (MPT)
Attn: OP-11, -12, -13
Arlington Annex
Washington, D.C. 20370

3

Defense Technical Information Center
Cameron Station
Alexandria, VA 22314

2